



Seagrass Quantification Plan for Progress Energy Florida, Inc.

*Hydroacoustic Sampling with
Species Point Sampling*

Revised Proposal

Submitted to Michael Shrader, Progress Energy Florida, Inc.
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ReMetrix

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Hydroacoustic Sampling with Species Point Sampling

General Summary for Updated Proposal

This document is a revision of a previous proposal for this project (dated 1-18-06). The revision addresses comments, questions, and requests received from Nia Wellendorf, Biology Section, FL DEP in May, 2007.

The most obvious changes are amendments to the proposed sampling plan. The table below summarizes the changes between the previous sampling plan and the current one.

Table 1. Summary of changes to the sampling program.

Sampling Method	1-18-06 Proposal	Current Proposal	Change
Hydroacoustic <i>transect coverage</i>	<i>210 linear km</i>	<i>210 linear km</i>	<i>same</i>
Physical sampling <i>double-sided thatch rake</i>	<i>50 sites, along transects</i>	<i>100 sites, along transects</i>	<i>+50</i>
Diver quadrats <i>primary sites</i>	<i>none</i>	<i>10 at veg sties, along transects, in pre-determined depth ranges</i>	<i>+10</i>
<i>ad hoc sites based on field obs.</i>	<i>as needed</i>	<i>as needed</i>	<i>same</i>
<i>additional QA/QC points</i>	<i>a couple</i>	<i>none</i>	<i>-2</i>
Underwater video <i>primary sites</i>	<i>none</i>	<i>10 co-located with diver sites, along transects</i>	<i>+10</i>
<i>ad hoc sites based on field obs.</i>	<i>as needed</i>	<i>as needed</i>	<i>same</i>
<i>additional QA/QC points</i>	<i>a few</i>	<i>min. of 10 at veg sites, along transects</i>	<i>+7</i>
Water quality <i>primary sites</i>	<i>none</i>	<i>5 sites the first day; 2 sites repeated every 48-60 hours; 10 co-located with diver sites.</i>	<i>+5 +8 +10</i>
Miscellaneous QA/QC <i>ad hoc sites</i>	<i>20 sites, off transects, any method</i>	<i>20 sites, off transects, any method</i>	<i>same</i>

Other changes are incorporated in the revised proposal below. Any changes from the previous version are **highlighted in gray**. Non-highlighted portions of the proposal remain unchanged.

The revised budget for the project, based on the changes, is \$52,374.

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

General Summary (from original 01-18-06 proposal)

This proposal outlines a seagrass quantification plan for approximately 3,000 acres of coastal ecosystem in the Gulf of Mexico adjacent to the Progress Energy Florida facilities in Citrus County, FL. The plan is designed to be as efficient as possible regarding data collection and data delivery schedules.

ReMetrix proposes a field sampling program primarily using a high-resolution hydroacoustic grid and physical species point sampling. The combination of these two methodologies represents a marriage of the most practical, rapid, and thorough approaches available for assessing seagrass and algal communities in the study area. Secondary methodologies of diver points and DGPS-linked color underwater video will also be used as site conditions permit.

On November 30, 2005, ReMetrix successfully tested all of the proposed sampling methodologies at the study site. The company found that the best approach will be to adaptively use all of the sampling tools for the project. Hydroacoustics will be used to rapidly and completely map the large geographic area of the project, while more localized point sampling using thatch rakes, underwater video, and diving will provide detailed information on species characteristics. Sections C and E have information, maps, and figures from the Nov. 30 evaluations.

The results of the sampling program will be provided in various map and statistical formats within eight weeks the completion of data collection. A quality assurance/quality control program is included as part of the work plan (Section K).

Project timelines will begin as close as possible to the dates desired by the Progress Energy project manager.

Sincerely,



Doug Henderson
Commercial Manager
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Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

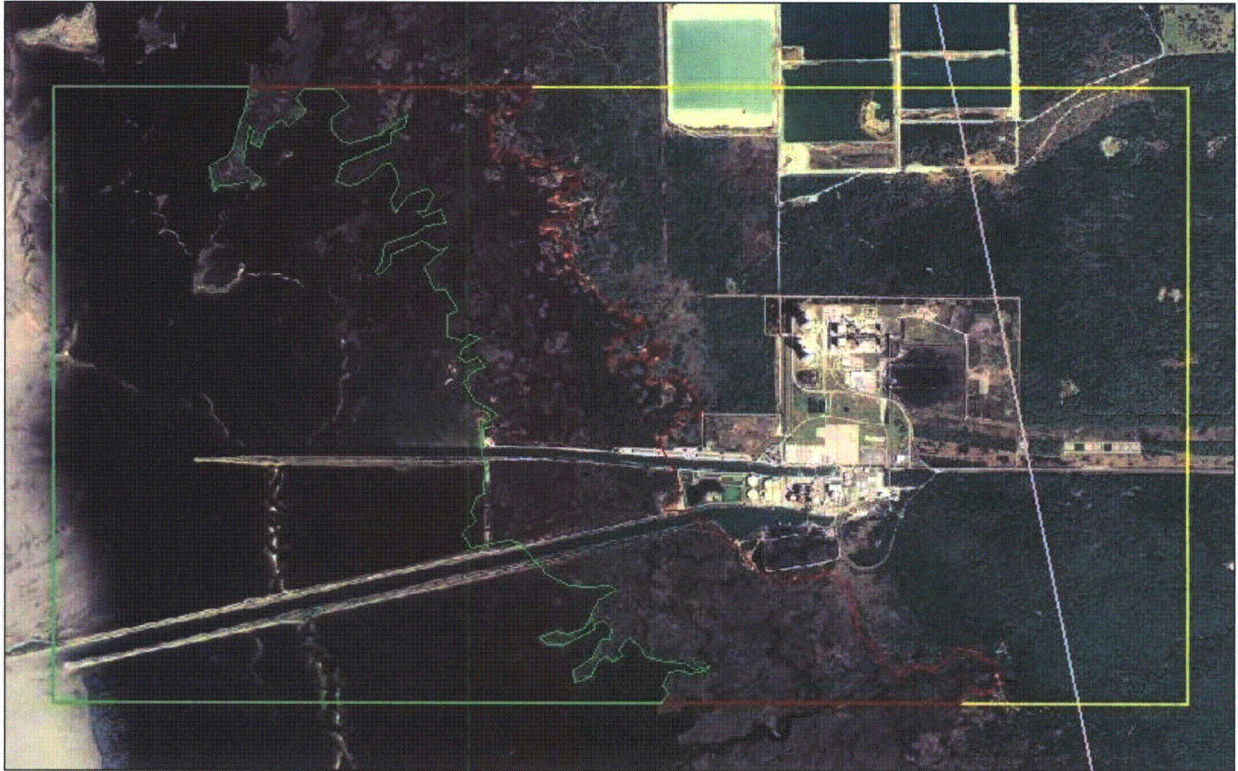


Figure 1. The area within the green outline is the study area for this proposal (approximately 3,000-acres).

A. Project Goals

The hydroacoustic seagrass sampling plan is designed to meet the following specific goals:

- (1) Quantitatively measure the cover and biovolume of seagrass at high resolution within the study area
- (2) Provide distinctions between seagrass and algae presence/dominance
- (3) Provide multiple types of data (raw and processed hydroacoustic, physical, and photographic) to support the study conclusions
- (4) Provide comparison of results with those from previous sampling programs

Each one of these goals is met in the plan below.

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

B. Study Area Description

The study area is the submerged region outlined in green in Figure 1 above. It is an approximately 3,000-acre coastal region in the Gulf of Mexico, adjacent to Citrus County, FL.

The study area varies from approximately three- to sixteen-feet deep and is affected by a semidiurnal tidal cycle that alters water levels from two- to four-feet within each tidal cycle. Unless otherwise noted in this proposal, water depths listed refer to the water depth at or very near high tide.

The study area supports the growth of rooted submerged aquatic vegetation (in particular, seagrass species), as well as floating, rooted, and epiphytic algae species. Seagrass species previously observed in the study area are: *Halodule wrightii*, *Syringodium filiforme*, and *Thalassia testudinum*. Algae species previously observed in the study area are rhizophytic and floating algae.

The study area is affected by very low water clarity. Navigation obstacles also exist in the study area.

C. Rationale for Selected Approaches

Six options exist for surveying submerged vegetation: physical sampling from the surface, hydroacoustic sampling, diver sampling, aerial/satellite imagery, underwater photography/videography, and empirical surface observations.

Each option varies in applicability based on local site conditions. Hydroacoustic and physical sampling are not affected by poor water clarity. The other four sampling techniques are affected by poor water clarity to varying degrees.

November 30, 2005 sampling evaluations

ReMetrix evaluated four sampling options at the project study area on November 30, 2005.

Based on these evaluations, hydroacoustic and physical point sampling (rake sampling) are



proposed as the primary techniques for this assessment. Color underwater video and diver sampling are also proposed as supporting sampling techniques. The degree to which the supporting techniques can be used depends on the water clarity during the project sampling window.

Two different species of seagrass were found during the survey: *Halodule wrightii* (Shoal

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

grass) and *Thalassia testudinum* (Turtle Grass). The *Halodule wrightii* coverage occurred primarily in the shallower (~3-4 feet at +3.3 feet high tide) waters of the study area. November's survey found only sparse amounts of *Thalassia* with blade lengths measuring no more than 20 cm. Low-light color underwater video aimed at the seabed attached to a telescoping pole at a 45-degree angle was able to identify and record both species.

It is important to note that the sampling evaluations were carried out near the annual low-point of seagrass growth cycles. Water temperatures on November 30 were 19.3°C. Most seagrass species decline in areal density and blade length below 20°C. **Despite sampling at a time when local seagrasses are at their annual minimum size and densities, all of the proposed sampling methodologies—including hydroacoustics—proved to be successful.** This result strongly suggests that ReMetrix's proposed sampling plan will be fruitful. Even if water clarity is very poor during sampling period, the hydroacoustic and physical sampling approaches will still be able to complete the project successfully.



Halodule wrightii sample collected Nov. 30, 2005

Results and additional photos from the November 30 hydroacoustic and physical sampling evaluations are included below in Section E.

Hydroacoustic sampling is able to rapidly quantify large spatial areas for overall vegetation cover and biovolume (height in the water column). The large size of the project study area (~3,000 acres) lends itself well to hydroacoustic sampling. Hydroacoustic sampling does not currently distinguish between species, though it can improve the efficiency of species point sampling by targeting ideal places to sample based on variations in plant characteristics observed in the acoustic signal.

Physical sampling will be used to determine the species composition within the areas shown by hydroacoustic sampling to have submerged vegetation communities. Physical sampling is also efficient in large study areas.

Color underwater video and diver sampling will also be used for this project (unless water clarity is particularly poor). Both techniques allow up-close visual observations regarding species composition and other relevant habitat characteristics.

ReMetrix digitally records underwater video clips and encodes a DGPS coordinate on the video track at the moment of collection. This enables video clips to be located and reviewed at a later time if necessary to verify physical or hydroacoustic sampling results during analysis. Despite

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

moderate success using this technique on the evaluation day, the frequent poor water clarity issues reported in the study area render underwater video an uncertain tool to rely on as a primary methodology. It is also slower to use than hydroacoustic and physical sampling.

Diver sampling will be used periodically to support the other sampling types with high-resolution, high-detail species composition and habitat information. While diver sampling is the most detailed sampling technique, it is also the slowest and most labor-intensive sampling option. The large size of the study area makes widespread use of diver sampling relatively impractical when compared to other available techniques. Also the frequent poor water clarity issues reported in the study area render diver sampling an uncertain tool to rely on as a primary methodology. For these reasons ReMetrix plans to use diver sampling as a support methodology.

In summary, a combination of hydroacoustic and physical species sampling, supported by color underwater video and diver sampling, will provide the most comprehensive accounting of submerged vegetation within the study area.

D. Hydroacoustic Background Information

Hydroacoustic data are collected using a digital 420kHz BioSonics transducer mounted on a boat and actively linked to DGPS. The boat operator drives transects across the study area while the transducer pings the water column approximately five-to-ten times per second. The data from each ping are linked to a geographic coordinate via the DGPS beacon. Figure 2 depicts this process.

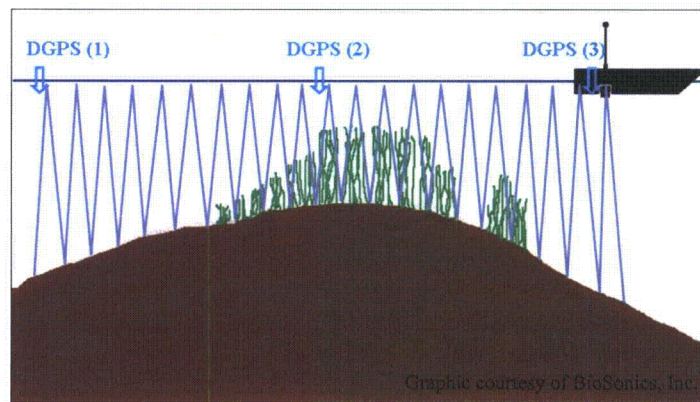


Figure 2. Schematic drawing of hydroacoustic data collection linked with DGPS.

BioSonics testing indicates that the hydroacoustic system returns digital samples with greater than 0.013% accuracy every 1.8 centimeters. Calibrations can be made daily in the field to address specific conditions, such as varying water temperature and salinity.

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

The data from each ping contain submerged plant cover and height information as well as the depth to the sediment layer. Figure 3 shows an example of the raw acoustic data collected along a transect.

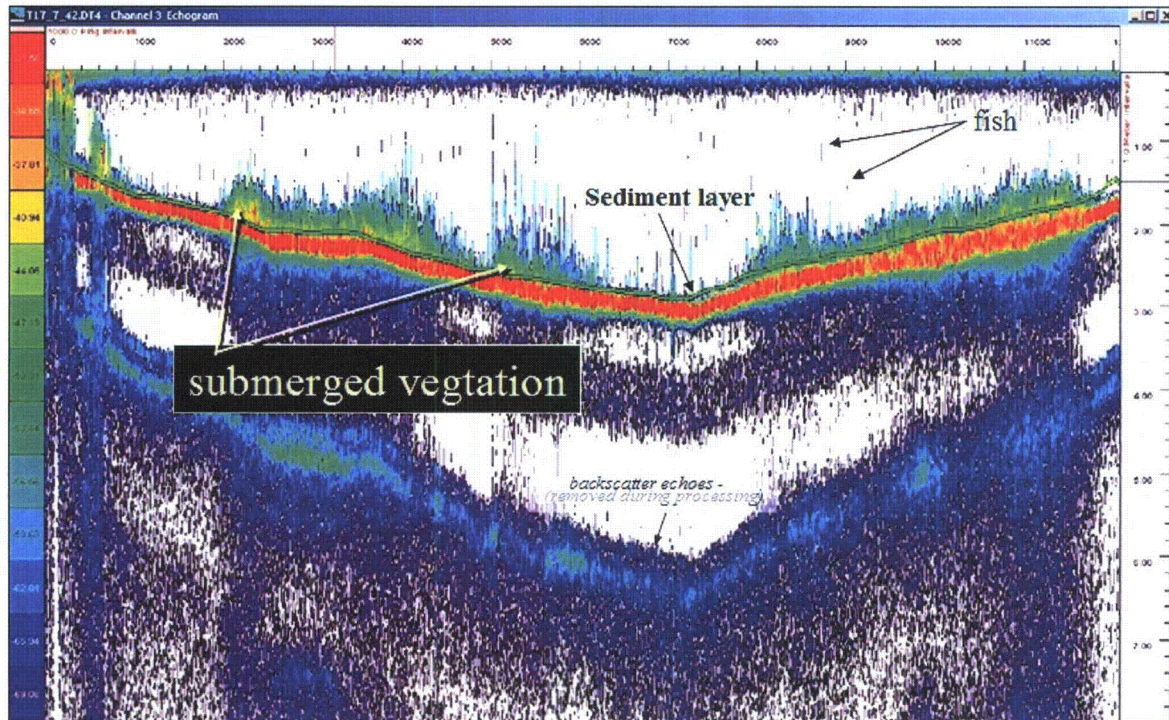


Figure 3. Raw hydroacoustic transect data showing submerged vegetation detection.

The raw acoustic data are processed to filter out noise, calculate statistics, and export the data for viewing in a Geographic Information System. Figure 4 shows an example of a fully processed transect, including vegetation cover and biovolume statistics for that transect.

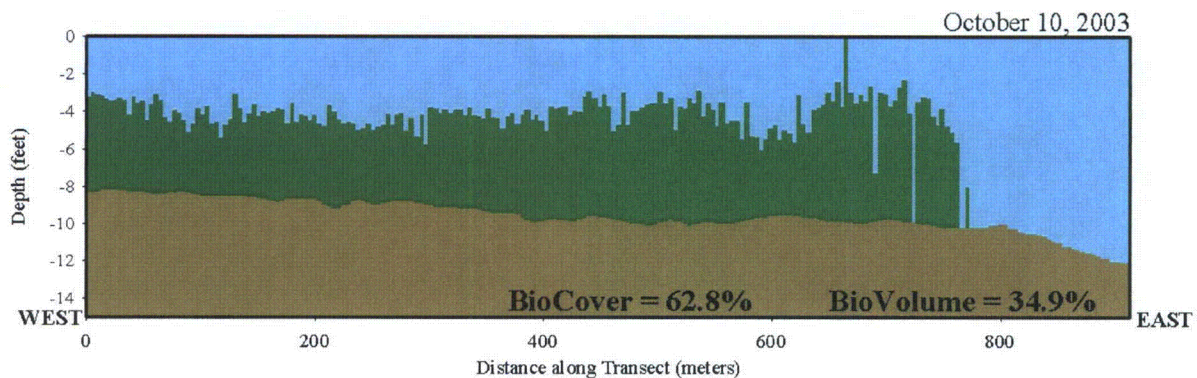


Figure 4. Example of a final processed hydroacoustic transect showing submerged vegetation cover and biovolume statistics.

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

Data from all of the transects in the sampling program are combined and modeled using geostatistical software to produce vegetation coverage and biovolume maps for the entire study area. Statistics indicating total vegetation coverage and biovolume for the entire study area are also calculated. Figure 5 shows an example of a submerged vegetation cover map.

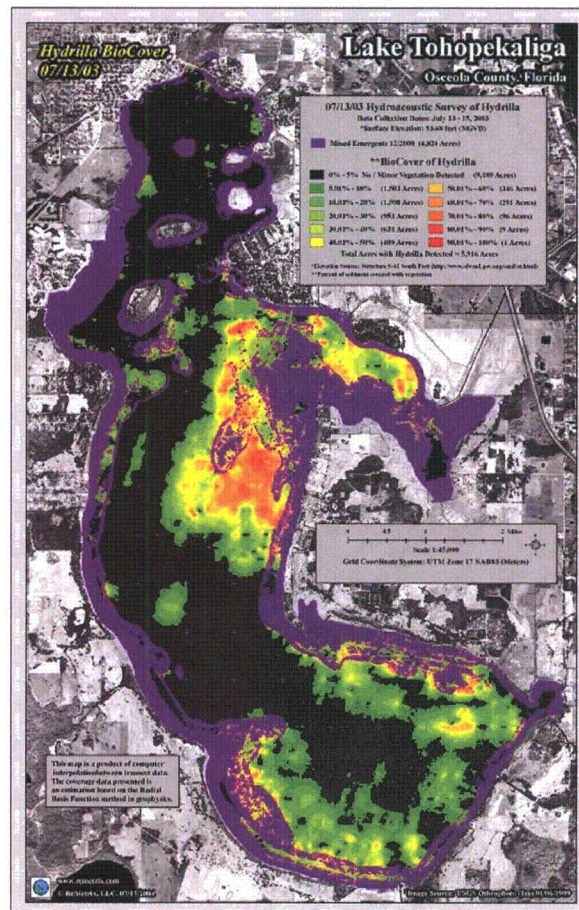


Figure 5. Example submerged vegetation coverage map modeled from a grid of hydroacoustic transects.

A key advantage of using hydroacoustic technology to map submerged vegetation characteristics is that the data are reproducible. Raw data can be re-analyzed for verification and/or specific transects can be re-collected if necessary.

Hydroacoustic vegetation sampling can not currently explicitly determine species by their acoustic signatures. However hydroacoustic vegetation mapping can sometimes implicitly delineate species based on their relative structural characteristics. For example, tall spindly species have a different

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

acoustic signature than short, leafy species. These growth habit differences can sometimes be exploited to better delineate where one species or plant community transitions to another.

Situations where vegetation structural transitions can be accurately defined add further value to the hydroacoustic data collection approach. It is nearly impossible to predict in advance if the characteristics of a given water body will enable this kind of acoustic species differentiation. However if such opportunities become apparent as the project progresses, ReMetrix will attempt to extract that extra information out of the hydroacoustic data.

E. Hydroacoustic Sampling Methodology and Plan

Methodology

Hydroacoustic data will be collected between 14-15 pings per 3-5 meters (approximately 1 ping per foot) in continuous fashion along each transect. In waters shallower than 3-meters depth, the

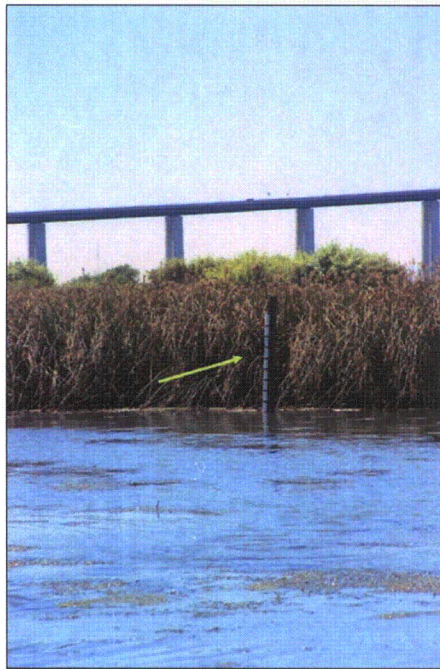


Figure 6. Digital pressure transducer to record tidal changes during data collection. Tidal data are used to normalize water depth during hydroacoustic data processing.

hydroacoustic data will be collected within +/- 2.5 hours of high tide. It is important to collect shallow-water hydroacoustic data near high tide because the transducer collects cleaner data when the water column is at its deepest. In waters deeper than 3-meters depth, hydroacoustic data may be collected at any time. It is also important that hydroacoustic data for this project be collected in calm weather. For these reasons ReMetrix recommends that at least a three week window of time be allotted to conduct sampling. The greater control in selecting ideal collection days, the better the final data will be.

A digital pressure transducer will be deployed each day during data collection operations (Figure 6, at left). The pressure transducer accurately logs water depth once every five minutes with a vertical accuracy of 0.5-cm. The pressure transducer thereby measures the water level change due to tidal flux. The data from the pressure transducer is later integrated into the hydroacoustic data analysis to correct for the constant water level fluctuation. The use of the pressure transducer is an important step in the hydroacoustic data collection and analysis process.

Plan

ReMetrix proposes collecting digital acoustic transects totaling 210 km (~130 miles) in cumulative length. Figures 7a and 7b show proposed general transect layouts, each

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

representing approximately 210-km of total transect length. Figure 7a shows a grid with 60-meter spacing in the north-south direction and 400-meter spacing in the east-west direction. Figure 7b shows an evenly spaced grid with 100-meter spacing.

Both layouts are considered to be high-resolution grids for an area of this size. ReMetrix prefers to collect a grid pattern similar to that shown in Figure 7a based on our experience collecting data in complex tidal areas. (It is most efficient to align the majority of transects parallel to the shoreline due to the tides.) ReMetrix will attempt to follow the proposed transect layout as much as possible, though field obstacles will periodically necessitate re-routing. Even with re-routing, a minimum of 210-km of hydroacoustic transects will be collected within the study area.

ReMetrix is open to suggestions for alternate grid layouts. We will endeavor to collect the grid layout that best meets the goals of the project. Alternate grid layouts may require project pricing adjustments.

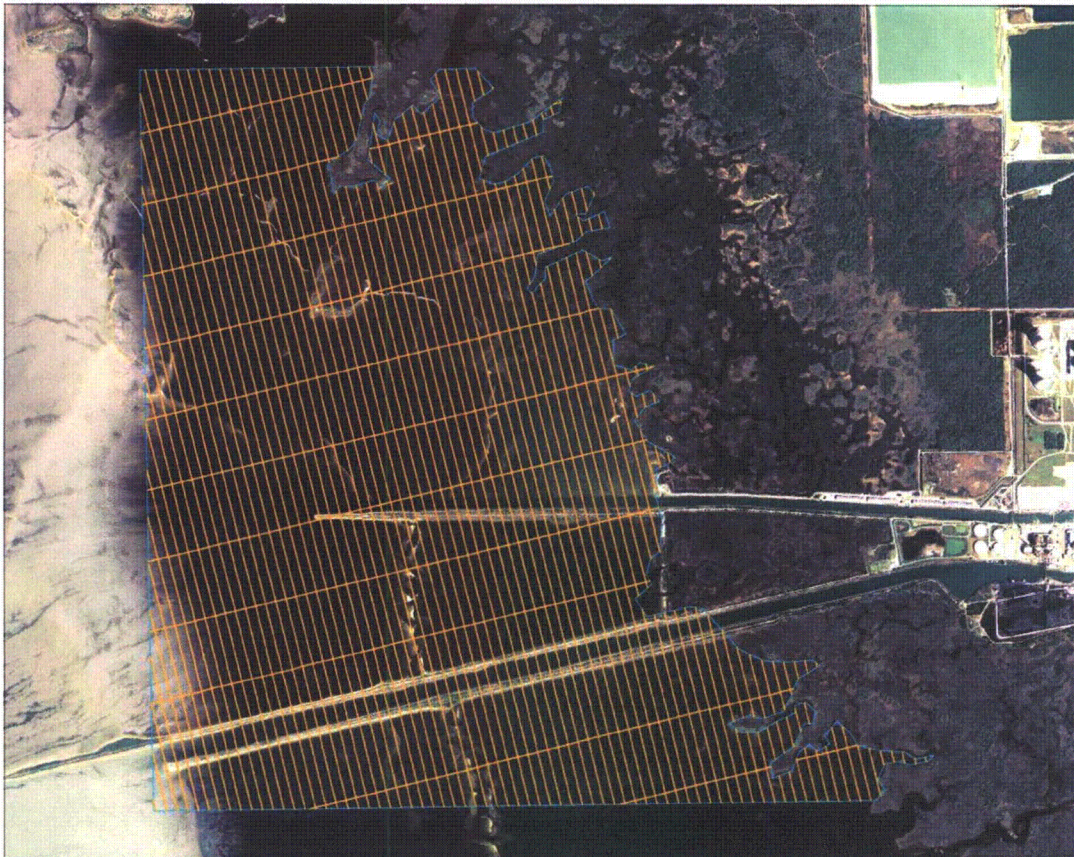


Figure 7a. Proposed general hydroacoustic sampling grid in orange. Closely spaced transects (roughly north-south) are spaced at 60-meters; cross transects are spaced at 400-meters.

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

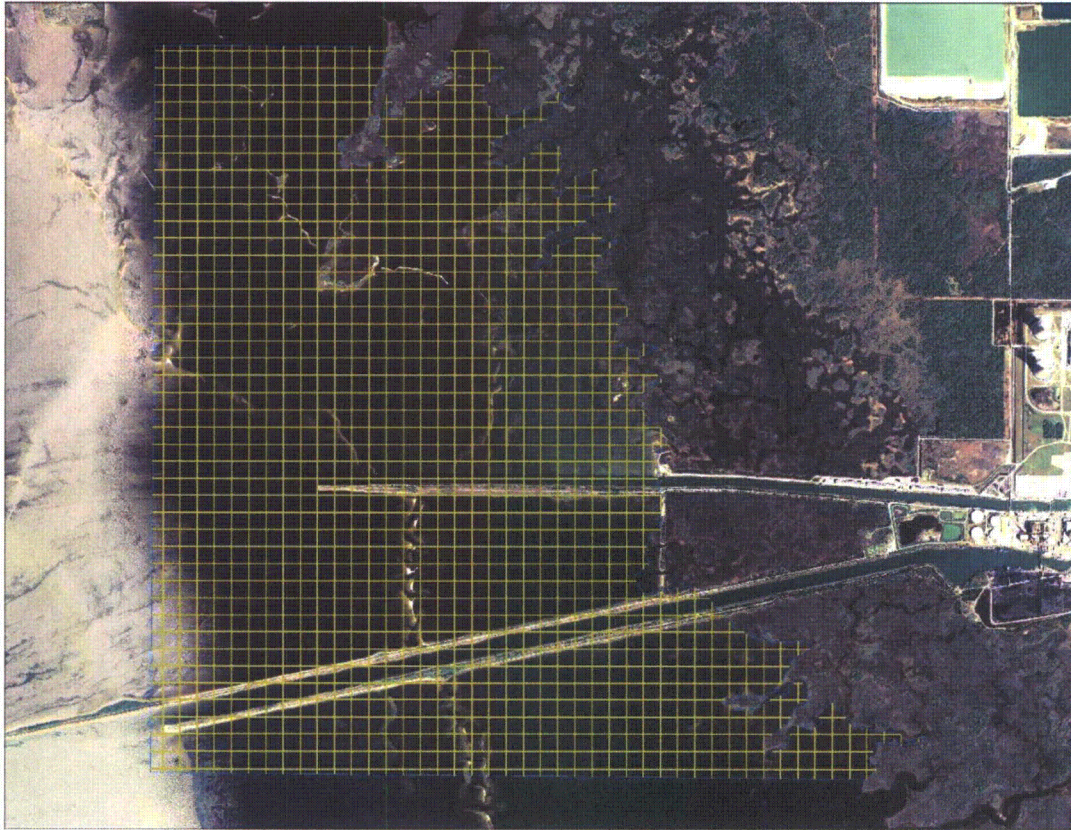


Figure 7b. Alternate general hydroacoustic sampling grid in green. Transects are spaced at 100-meters in each direction.

Hydroacoustic vegetation data from all of the transects combined will be modeled to produce seagrass cover and biovolume maps for the entire study area (as shown in Figure 5 above). Associated statistics for modeled cover and biovolume will be included. A subset of transects in each detailed area will also be displayed as plant bottom coverage and biovolume cross-sections, along with the cross-section statistics (as shown in Figure 4 above).

Figures from the November 30, 2005 evaluations

Figure 8 shows the hydroacoustic transects, physical samples, and vegetation detected during the November 30 sampling day. Figures 9-14 show the details of data from two hydroacoustic segments.

As can be seen in the figures—especially Figure 10—seagrass is definitely visible in the hydroacoustic signal.

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

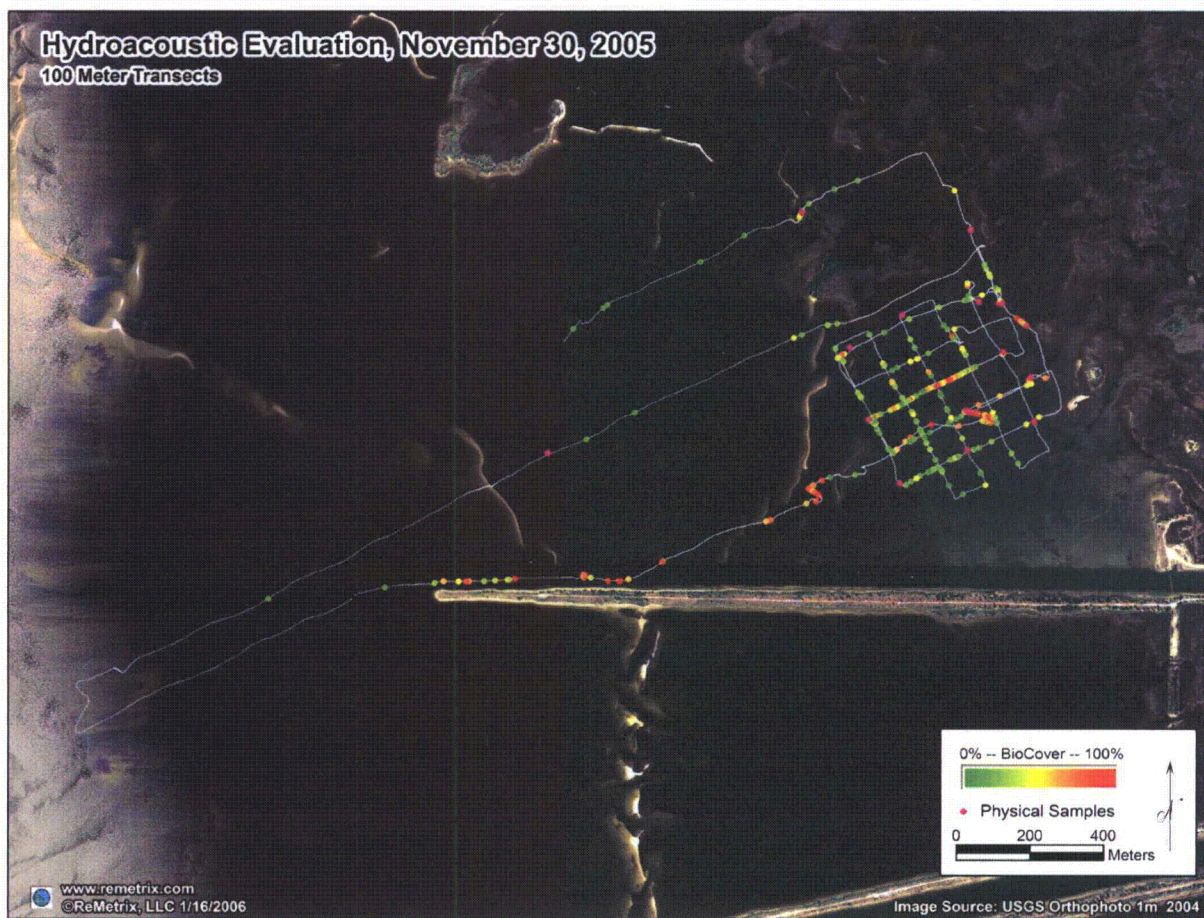


Figure 8. November 30, 2005 hydroacoustic transects and physical sample locations. Colored dots show the areas where submerged vegetation was detected...green dots represent sparse cover, gradationally changing to red dots that represent dense cover (see legend on map). Magenta diamonds indicate physical sample sites.

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Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

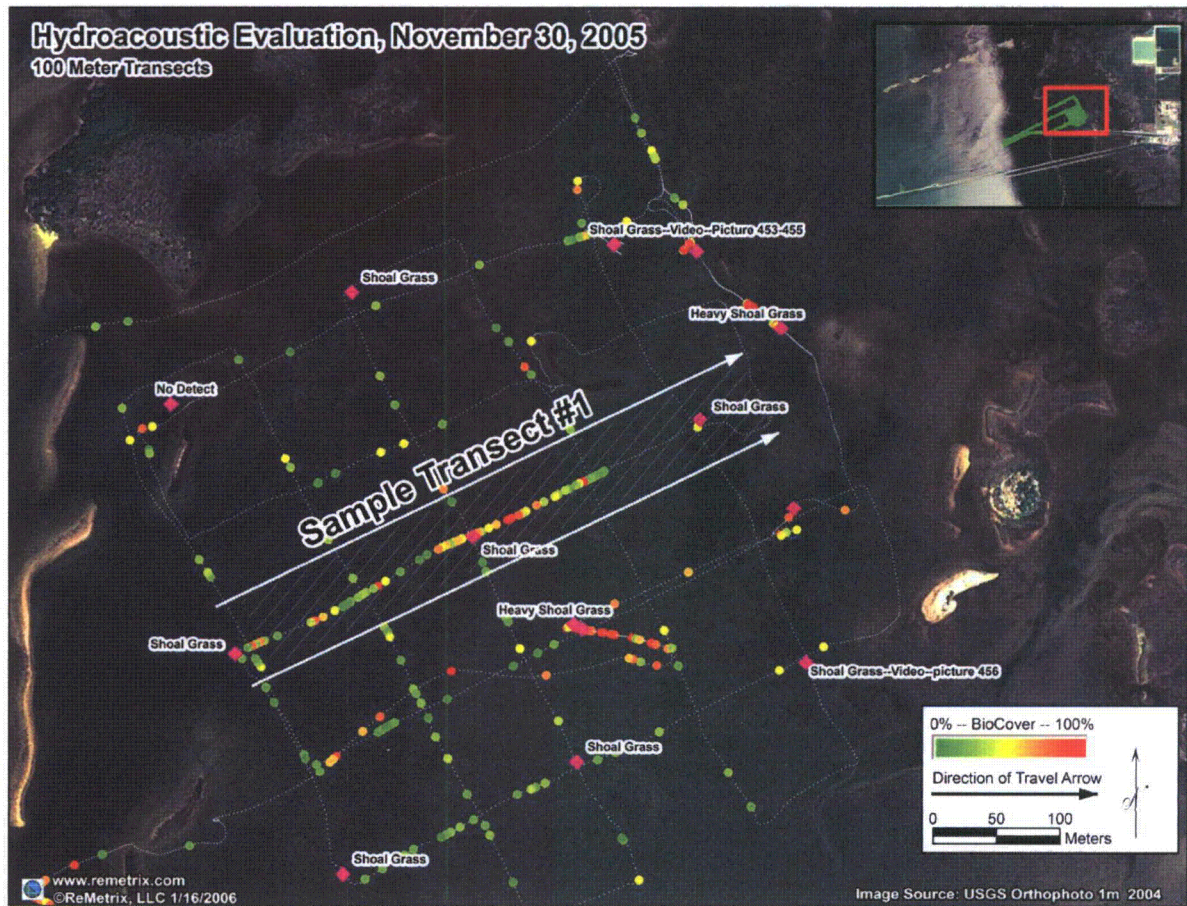


Figure 9. Detail of sampling grid in evaluation area. A cross-section of Sample Transect #1 is shown in the figures below.

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Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

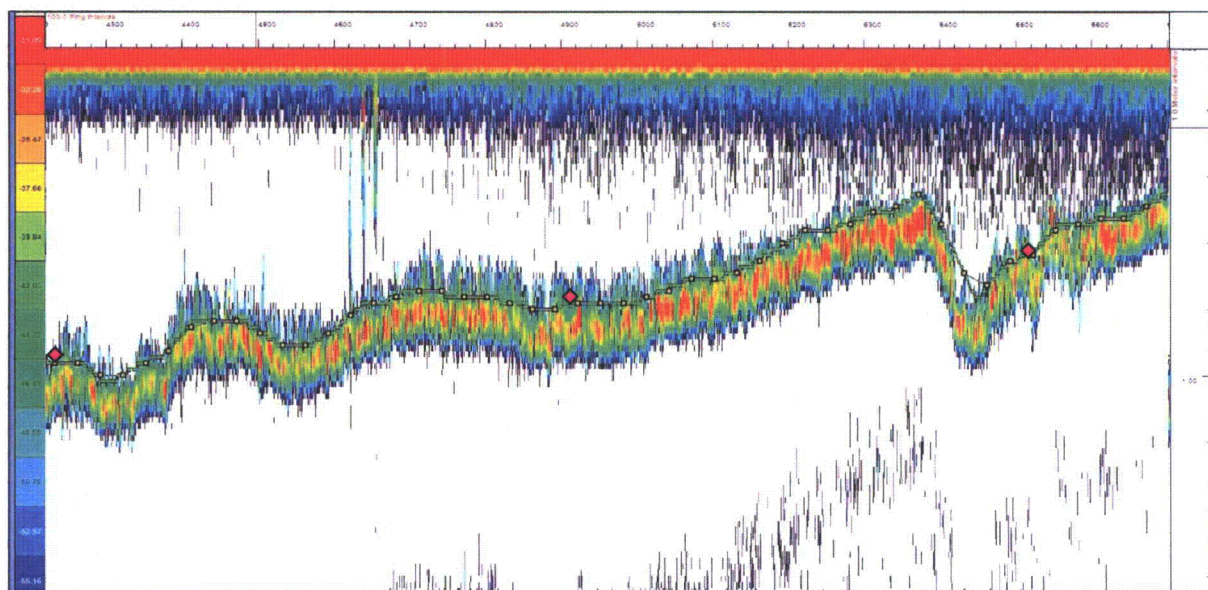


Figure 10. Cross-section of raw hydroacoustic data for Sample Transect #1. The seabed is shown by the segmented line. Submerged vegetation is clearly visible above the bottom along much of the transect. This is identified as seagrass based on the three physical samples collected along the transect (magenta diamonds).

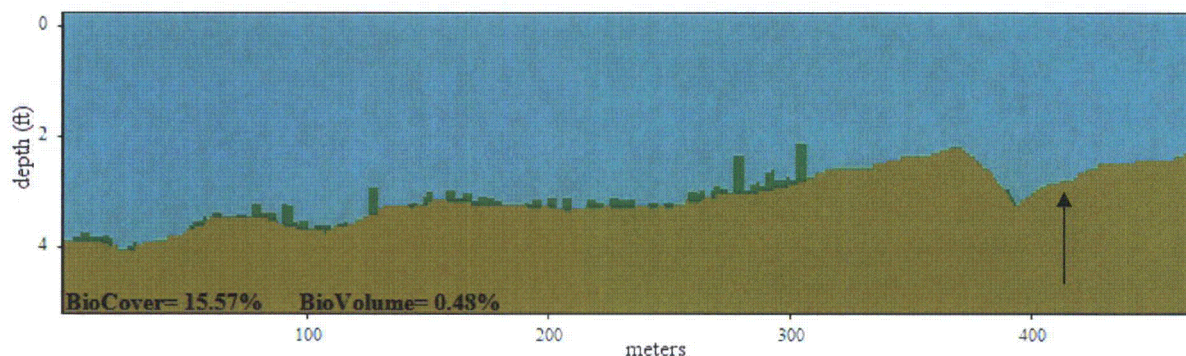


Figure 11. Final post-processed cross-section of Sample Transect #1. Green bars depict seagrass coverage along the bottom. The transect has approximately 15% total BioCover, mostly of moderate density (approx 25%-55% density).

Note that the processing algorithm did miss a bit of vegetation (black arrow) that is visible in the corresponding raw data in Figure 10. ReMetrix can make adjustments to the algorithm processing parameters during the project to improve detection, but even as the algorithm currently exists it successfully mapped about 90% of the existing vegetation.

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

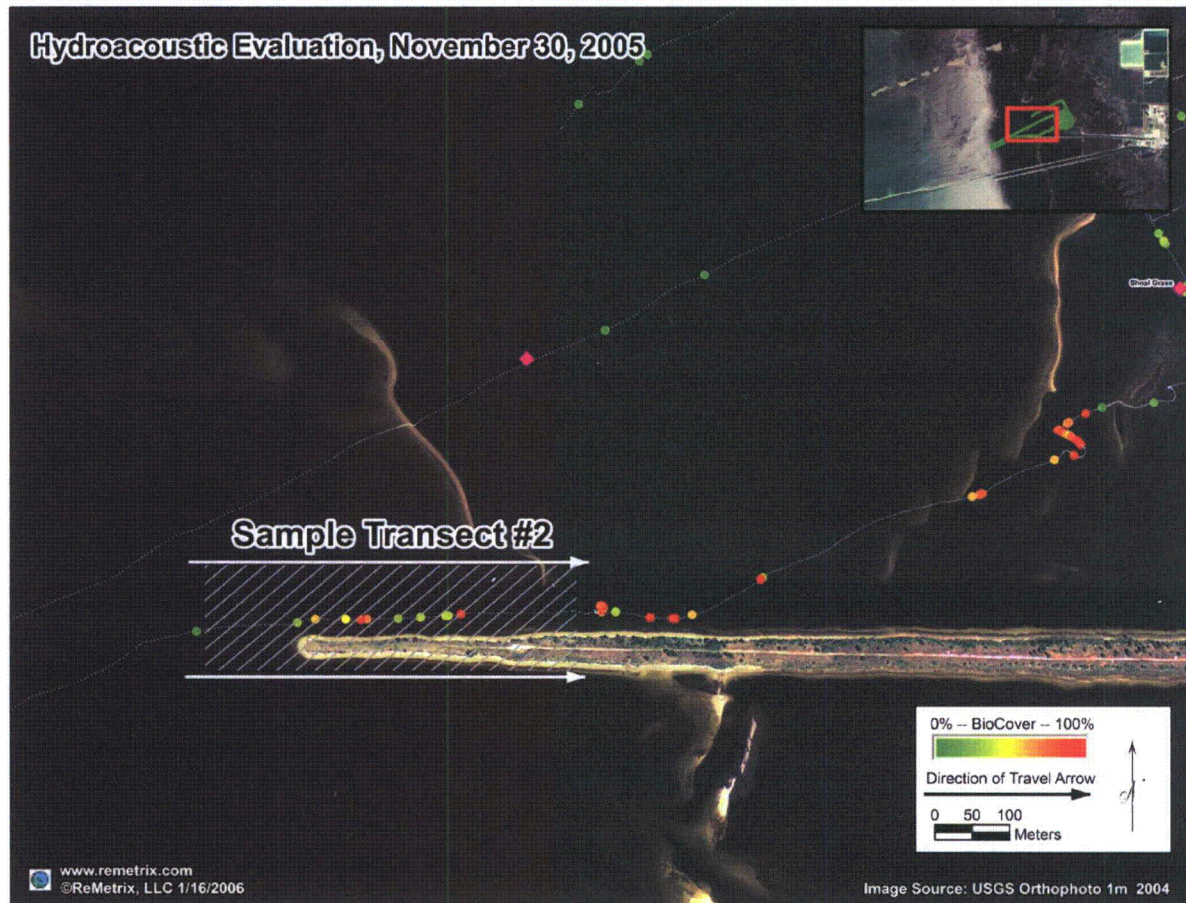


Figure 12. Detail of sampling grid in evaluation area. The hatched region is shown as Sample Transect #2 in figures below.

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Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

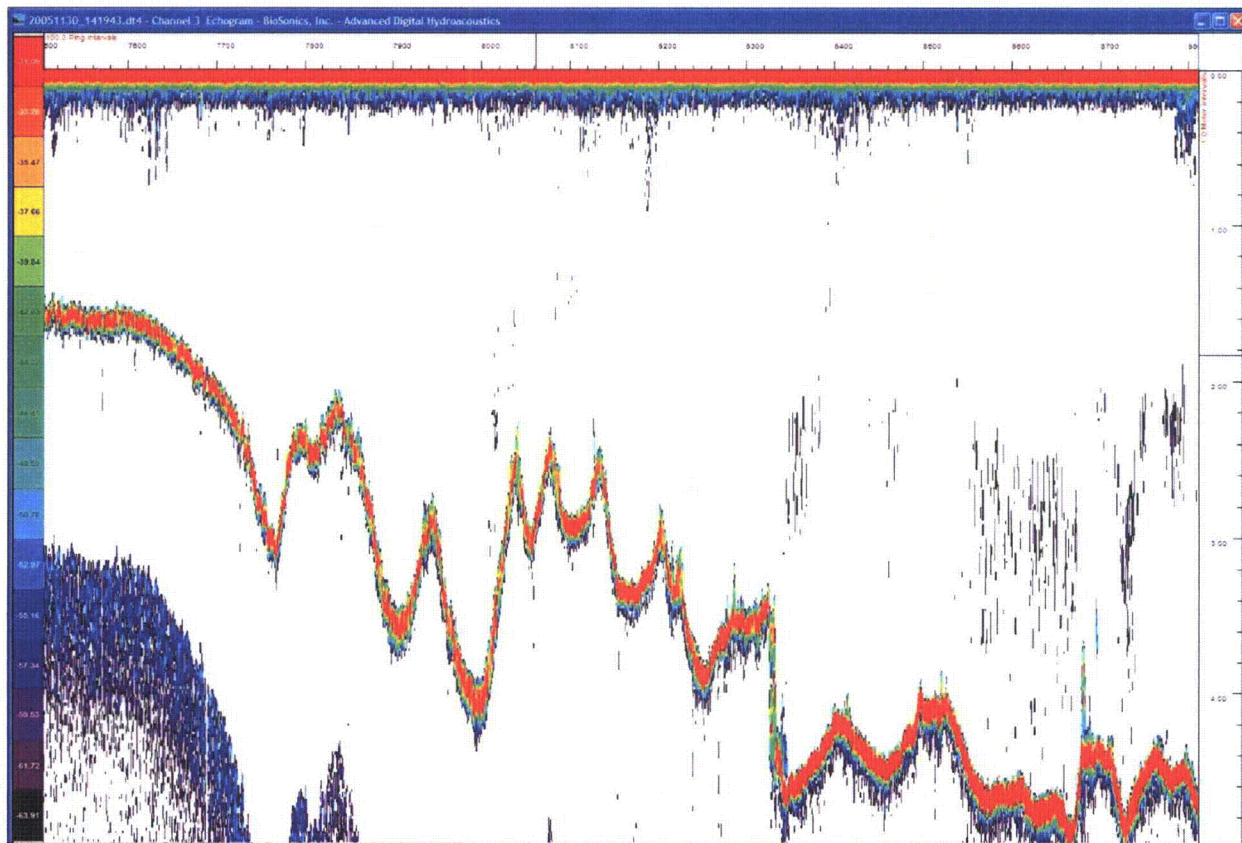


Figure 13. Raw hydroacoustic data for Sample Transect #2, as marked in Figure 12. Only very sparse submerged vegetation was detected in this transect.

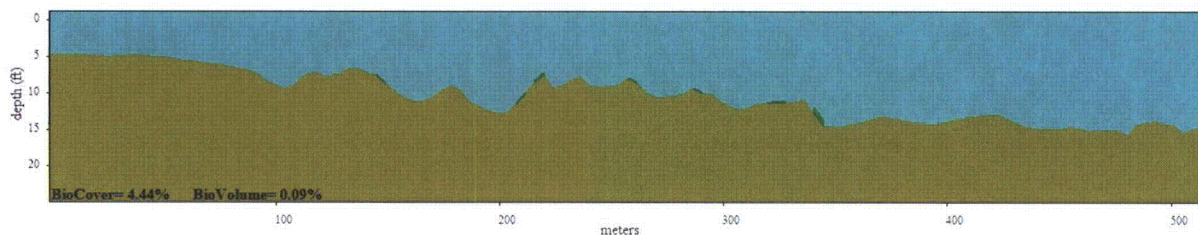


Figure 14. Final post-processed cross-section of Sample Transect #2. Green bars depict seagrass coverage along the bottom. The transect has approximately 4% total BioCover, mostly sparse.

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Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

F. Historical Species Sampling Within the Study Area

Two types of surveys were conducted in Estevez and Marshall (1995). A transect survey of 'barren areas' was conducted to find new colonies of seagrass and/or macroalgae. A site survey of 'intensive SAV beds' was conducted to measure changes in a representative sample of pre-existing seagrass/macroalgae beds.

Table 2. Species recorded in Estevez and Marshall (1995).

Seagrass species:	Macroalgae species:
<i>Halodule wrightii</i> (Shoal grass)	<i>Caulerpa</i> sp. (<i>C. prolifera</i> and <i>C. mexicana</i>)
<i>Syringodium filiforme</i> (Manatee grass)	<i>Udotea conglutinata</i>
<i>Thalassia testudinum</i> (Turtle grass)	<i>Halimeda incrassata</i>
<i>Halophila engelmannii</i> (Star grass)	<i>Penicillus</i> sp.

'Barren areas' were surveyed by towing a diver along fixed-transects. Total length of the 14 transects surveyed was approximately 13 km. The diver would mark the locations of new SAV beds (seagrass and/or macroalgae) and record species composition and percent cover.

Percent cover was measured using a 1-m² quadrat marker divided into a grid of 100-cm² cells. Percent cover was calculated by counting the number of cells containing at least one rooted seagrass and/or macroalgae species.

Fifteen 'intensive SAV beds' were surveyed for bed size, water depth, sediment thickness, percent bottom cover, shoot count, above-ground biomass, and productivity. Twenty quadrats (1-m²) were collected per bed for percent bottom cover (10 quadrats along bed perimeter and 10 quadrats in bed interior).

Shoot count, above-ground biomass, and productivity were collected to determine SAV condition, based upon the methodology of Mattson, et al. (1986). Six quadrats (625-cm²) were collected per bed for above-ground biomass of seagrass and macroalgae. Six quadrats (100-cm² for *Halodule*; 219-cm² for other seagrasses) were collected per bed for productivity and shoot counts.

G. Species Sampling Methodologies and Plans

ReMetrix will record the same taxa as were recorded in previous studies. The following methods and strategies will be used to survey and distinguish between species. Section G(iii) discusses distinguishing between seagrasses and algae.

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

i. Physical Species Sampling Methodology and Plan

Methodology

A double-sided, weighted, sharp-tined thatch rake-head attached to a rope will be used to collect physical species samples of vegetation. Two samples will be collected per sample site. At each sample site the boat will stop, a DGPS point will be recorded, and the sampling rake will be "pressure-raked" across the seabed lifting the seagrass by its rhizomes embedded in the top sediment layer (Figure 15, photo at left).



This methodology was successfully tested during the November 30, 2005 evaluation day.

Figure 15. Thatch-rake physical sample collected November 30, 2005 in study area.

Vegetation and algae collected by the rake will be assessed and recorded for species presence/absence, relative abundance, and density. Relative abundance of each species will be determined according to Table 3 below.

Table 3. Scale for relative abundance measurements per species.

Scale	Description
100%	Present as ~100% of sample [†]
75%	Present as ~75% of sample [†]
50%	Present as ~50% of sample [†]
25%	Present as ~25% of sample [†]
5%	Present as ~5% of sample [†] or less

[†] sample in this context refers to an aggregate of both samples per physical sample site

Density will be determined by gently compressing the aggregate vegetation sampled at each site across demarcated tines on the sample rake, analogous to that shown in Figure 16 below. Tines are marked at 20% and 60% of the distance along their length. Density will be recorded according to Table 4 below. Vegetation will not be separated by species for density measurements.

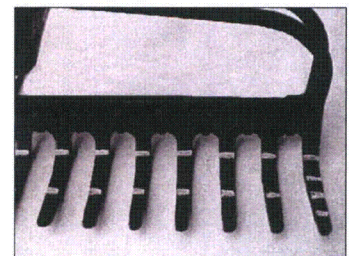


Figure 16. Thatch-rake physical sample collected November 30, 2005 in study area.

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

Table 4. Scale for vegetation density measurements per sample[†].

Scale	Name	Description
D	Dense	>60% of rake tines
C	Moderate	20%-60% of rake tines
B	Minor	Up to 20% of rake tines
A	Sparse	1-5 stems

[†]sample in this context refers to an aggregate of both samples per physical sample site

While species presence/absence is a quantitative measure, relative abundance and density—as described above—are not. Instead they serve as a rapid surrogate for more quantitative methods to determine bottom cover and community composition. Using this rapid method allows for a greater total number of hydroacoustic ground-truth points and overall coverage of the study area. Ten of the physical sampling sites will also undergo diver sampling (described in Section G(ii)) to help quantify differences in estimates from the rake method and actual vegetation bed characteristics.

Plan

Physical species samples will be collected at a minimum of 100 points throughout the study area. Additional physical species samples above 100 may be collected at the discretion of the field biologist. Physical sampling is expected to require 1.5-to-2 days.

The physical species samples will be collected in a grid of pre-determined points. The proposed physical sampling locations will be submitted to the project manager at Progress Energy Florida for approval prior to the start of fieldwork.

To promote continuity between historical data sets and the current data set, ReMetrix is willing to sample at the same locations that were used for previous seagrass assessments within the study area. In general, ReMetrix is flexible about the locations of the physical sampling sites and will work with project managers to make sure that the needs of the project are met by the sampling design.

Species tables and maps will be produced from the physical sampling data.

ii. Diver Sampling Methodology and Plan

Methodology

A minimum of 10 diver sampling sites will be collected in the study area. The diver's sampling location will be recorded using a DGPS receiver on the survey vessel. (ReMetrix has a SCUBA-certified aquatic biologist on staff.)

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

The sampling area for diver sites will be a 1-meter by 1-meter quadrat. At each site, the diver will measure actual water depth, bed size, actual plant heights, percent bottom-cover, and species composition. Percent bottom-cover and species composition will be measured in the interior of vegetation beds using the quadrat-cell methodology of Estevez and Marshall (1995). ReMetrix will not record shoot counts, above-ground biomass, productivity, and sediment thickness because these metrics are outside the scope of this project.

Plan

The diver sampling sites will be located along transect lines to help quantify potential acoustic measurement errors during the survey, which relate to final biocover and biovolume estimations. The diver sampling sites will also be co-located with physical vegetation sampling sites (Section G(i)), video sampling sites (Section G(iii)), and water quality sites (Section H) so that the plant quantification results of the various methodologies can be compared and differences can be quantified.

Based on the preliminary 2005 survey, water depths in the study area range from 0.25-meter to approximately 5-meters, with the majority of depths <3-meters. Vegetation was found at all water depths, though was much more common at <2.5-meters of depth. Vegetation in areas deeper than 3-meters were not able to be verified on the day of the preliminary survey.

Assuming acceptable site conditions (esp. water clarity), the 10 diver samples will be collected in various water depths according to the table below:

Table 5. Depth range table for diver sampling sites

Water depth range (meters)	Diver sites sampled
0.5-1	2
1-1.5	2
1.5-2	2
2-3	2
3-4	1
4-5	1
Total	10

Six of the 10 sites are in waters <2-meters deep. This reflects the suggestion in the FL DEP comments that an emphasis be placed on quantifying hydroacoustic errors in waters <2-meters deep. If conditions during the field sampling period prevent diver sampling at a specific depth interval (e.g., between 4-5 meters), the sample point from that interval will be bumped to the next shallower depth interval.

Additional diver sampling sites may be added as the survey progresses in the field, depending on field observations, sampling conditions, and time. Changes in acoustic signal response, physical sampling, and/or underwater video help target sites warranting a closer look via diving.

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

Species tables and maps will be produced from the diver sampling data.

iii. Underwater Video Sampling Methodology and Plan

Methodology

The ReMetrix color underwater camera system digitally records video clips and tags them on the video track with a DGPS signal during collection. The camera system illuminates the water column in front of the lens with a series of lights to improve visibility and image quality. The effect of the illumination is sometimes greatly diminished by poor water quality and thus the camera is not always able to collect a high quality image even with the lighting. *For this reason, all proposed video sampling is dependent on sufficient water clarity to accurately discern targets.*

Plan

Color underwater video sampling will be conducted at the 10 diver sampling sites (Section G(ii)). This emphasizes areas <2-meters deep and provides corroboration between video results and diver results.

ReMetrix will also collect a minimum of 10 additional underwater video samples at vegetated sites along transects. The location of additional underwater video collection sites will be determined as the survey progresses in the field. As hydroacoustic data are being collected, changes in acoustic signal response identify locations where the ReMetrix field team considers taking a closer look beneath the water column.

iv. Distinguishing Between Seagrass and Algae

Distinguishing Between Seagrass and Rhizophytic Algae

Distinctions between seagrass species and rhizophytic algae species will be made during physical, diver, and underwater video sampling. This maintains consistency with previous studies.

Distinguishing between individual seagrass and rhizophytic algae species in the hydroacoustic data is not possible. The purpose of the hydroacoustic data is to better characterize the total number and acreage of submerged vegetation beds throughout the study area, as well as the individual sizes, locations, percent cover, and biovolume of the beds.

Data from the other methodologies will ground-truth the hydroacoustic results, in addition to providing the detailed species-level data that is desired. It is possible—though not guaranteed—that reasonable inferences may be able to be made between the hydroacoustic data and the species-level data. For example, certain combinations of bed depth, location, size,

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Hydroacoustic Sampling with Species Point Sampling

percent cover, and/or biovolume, may correlate well with a given species or mix of species. This will only be able to be determined during the latter stages of data analysis.

Distinguishing Between Rooted Species and Drift Algae

Comments from FL DEP reference the possible presence of drift algae up to 1-meter thick over the seagrass beds.

Large quantities of drift algae could present hydroacoustic challenges if present at or very near the sediment layer. Drift algae mats at or near the surface will be a navigational inconvenience but should not hamper the survey in any significant way. ReMetrix will simply navigate around the algae if necessary. Drift algae in mid water-column will not be confused with bottom growing vegetation and thus should not be a hindrance.

Thick layers of drift algae (such as >1.5-feet thick) near the bottom will strongly attenuate and/or absorb the hydroacoustic signal, but in doing so will create a different signal response than the sediment layer. This should make it possible to correct-for or eliminate most such areas within the data set (though doing so will create a data-gap when eliminated).

Thin layers and/or dispersed drift algae near the sediment layer may be more difficult to recognize in the hydroacoustic signal, depending on the specific characteristics of the drift algae (e.g., the amount of trapped air bubbles). Ground-truthing activities occurring throughout the survey should help determine if drift algae is present in this manner. If present in abundance, it is expected to affect the percent cover and biovolume calculations within beds, but not the location and size of the beds. Also, as stated earlier, unusual changes in the hydroacoustic signal response as the survey progresses will alert the field team to investigate closer and determine the nature of the signal response.

It should be noted that no problems with drift algae were encountered during the November, 2005 evaluations. Nevertheless, the scheduling of field data collection should attempt to take advantage of seasonally low periods of drift algae, if at all possible.

H. Water Quality Data Collection

Methodology

Water temperature, salinity, turbidity, and light transmittance will be recorded using various tools. Temperature and salinity will be measured using a YSI 556 multiprobe. Turbidity will be measured using a Lamotte 2020 turbidity meter (range 0-1100 NTU). Light transmittance will be measured using a Secchi disk.

Sampling will be conducted before any physical sampling occurs at each site in order to avoid disturbance of the sediment layer. Water depth will be physically recorded at each sample site.

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

Water temperature, salinity, and turbidity measurements will be collected at least a foot below the water surface.

Plan

Water temperature, salinity, turbidity, and light transmittance will be recorded at a minimum of 15 sites. Ten of the sites will be the same as the diver sampling sites (Section G(ii)). Five of the sites will be independently selected and are referred to below as 'non-diver' sites.

The ten water quality sampling sites that are co-located with the diver sites will help compare water quality metrics with species-level seagrass/rooted algae/drift algae metrics.

Five non-diver sites will be sampled at or near high tide on the first day of the overall sampling program. These five sites will be located in various water depths according to the table below:

Table 6. Depth range table for initial water quality sampling sites that are independent of the diver sites (a.k.a., non-diver sites).

Water depth range (meters)	WQ sites sampled
0.5-1.5	1
1.5-2	1
2-3	1
3-4	1
4-5	1
Total	5

After the initial five sites are sampled, two of the five sites will be selected for ongoing water quality monitoring throughout the overall sampling period. The two sites will be sampled for the same parameters approximately every 48-60 hours (based in part on the progression of high tide). One of the two ongoing sites will be located in the 1.5-2 meter depth range, and one will be located in the 3-4 meter depth range.

I. Other Sampling Factors

Potential Field Hurdles

The unique characteristics of the study area present a few challenges to field data collection. Navigation obstacles exist within the study area, and sampling around these obstacles does result in additional field time.

Weather conditions can greatly hinder field data collection. Strong wind and/or rain render field data collection impossible. An extra day has been built into the sampling plan as a contingency for unfavorable sampling weather.

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

Water clarity and tides are discussed above in Sections C, E, G, H, and I.

ReMetrix has significant experience working in challenging aquatic environments. The company has collected data in stump-filled Florida lakes and swampy lakes in Louisiana. ReMetrix also has experience collecting data in large study areas (up to 40,000-acres) and in tidal systems. For the past four years the company has successfully completed multi-site submerged aquatic vegetation assessments across a tidal estuary of approximately 300 km². Such projects demonstrate that our company is capable of handling any field data collection challenges that may occur during this project. ReMetrix has all of the equipment necessary for conducting the proposed project.

Timing of Field Data Collection

ReMetrix will make every effort to collect the field data at the best time for Progress Energy Florida, Inc. We calculate that the proposed field data collection will take approximately 10-12 days to complete in total. ReMetrix works on a first-commitment schedule for planning field missions, so the sooner a project is confirmed the more likely field data collection can proceed at the desired time.

Sampling Adjustments for Patchy Vegetation

Occasionally near-surface vegetation species can occur in very spotty, non-contiguous patches within a sampling area. Should this occur, ReMetrix will add a few extra sample points in each patchy area in order to guarantee that the surface vegetation patches are indeed sampled. This is a situation that is nearly impossible to predict in advance, but can be easily accounted for once the sampling crew is in the field. The same scenario exists for floating vegetation/algal species.

Repeatability

All of the data collected will be georeferenced using DGPS. All raw data are digital, allowing for independent confirmation of results even years later. Furthermore, ReMetrix will work with the program manager to provide the final data and statistics in a format that enhances the ability to make comparisons between this project and previous/future efforts within the study area.

J. Data Processing and Delivery

ReMetrix will deliver sampling results in the forms of maps, tables, and statistics within the timeline proposed in Table 7 below. Faster delivery timeframes for portions of the data can sometimes be arranged. Please discuss with us if this is desired.

To date ReMetrix has processed hydroacoustic transect data greater than the distance from Seattle to San Diego. Hydroacoustic data will be processed and mapped by trained, experienced data analysts in a very efficient manner. To date ReMetrix has also processed and mapped physical vegetation sample data from over 11,000 points.

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

Maps, tables, and statistics from this project will be compared to any results provided from previous assessments. ReMetrix will work with the Progress Energy Project Manager to determine desired method(s) of comparison and resulting deliverables. Comparisons to data from other years are also possible if previous data is provided in ESRI, MS Excel, or other common digital format.

Maps are available in multiple printed and digital formats, including large-format plots. A summary report will also be provided that outlines methodologies used to complete the project. Drafts of the final deliverables can be provided for review and comment if desired, though extra time for draft reviews may need to be added.

K. QA/QC Plan

The ReMetrix QA/QC plan involves three components:

1. Copies of all raw data will be preserved. These can be accessed for verification of results if necessary.
2. Up to four different data types will be collected. The above sampling plans ensure that redundant data collection will occur at numerous sites throughout the study area:
 - At least 100 sites will have an overlap between hydroacoustic and physical sampling;
 - At least 10 sites will have an overlap between hydroacoustic and diver sampling;
 - At least 20 sites will have an overlap between hydroacoustic and underwater video;
 - Ten sites will have an overlap between diver and underwater video.

Some sites may end up having all four data types, permitting multiple methods of cross-referencing and ground-truthing.

3. At least 20 additional random physical samples, video samples, and/or diver samples will be collected off-transects throughout the study area. These will be used to help verify and improve the results of vegetation data modeled between the hydroacoustic transect lines. This approach reproduces the practice of field verification of final draft maps without incurring the extra costs of a second field visit. Once errors of omission and commission (Type I and II errors) are calculated, the additional sample points can then be incorporated into the final analyses to refine the final maps and calculations, if necessary.

L. Budget

The proposed price for this comprehensive seagrass and algae assessment plan is \$52,374.

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

The proposed price accounts for all aspects of fieldwork and data processing as described above. Based on the proposed scope above, the project budget will not exceed the total amount proposed. If the project scope is changed prior-to or during the project, budget adjustments may need to be made. Such scope changes must be mutually agreed upon between ReMetrix and the client's Project Manager prior to implementation.

The price above is valid for six months from the date of this proposal.

ReMetrix requests 20% of the project budget be paid in advance of the project initiation in order to help cover field deployment costs. The remaining project budget will be invoiced monthly based upon percent completion of the project (a.k.a., progress billing).

M. Estimated Project Timeline

The schedule below is proposed and can be amended as necessary.

Table 7. Proposed project schedule.

Step	Task	Proposed Timeframe	Description
1	Field data collection	Sampling window to be determined by Progress Energy project manager	Hydroacoustic and physical point sampling (also video and diver sampling if conditions permit)
2	Data analysis	8 weeks after fieldwork completion	Hydroacoustic, GIS, and geostatistical processing
3	Comparison to historical data	4 weeks after Step 2 completion	Change-comparisons
4	Delivery of preliminary results	1 week after Step 3 completion	Draft results submitted for feedback
5	Delivery of final results and summary report	4 weeks after draft feedback received	Completion of project.

N. Previous, Similar Work Experience for the Florida DEP

ReMetrix has conducted many submerged vegetation assessments using hydroacoustic technology for the Florida DEP since 2000. More than a dozen Florida public lakes have been assessed for hydrilla cover and biovolume for the DEP's Bureau of Invasive Plant Management. The point-of-

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Hydroacoustic Sampling with Species Point Sampling

contact for this work is Jeff Schardt, Director, Aquatic Plant Management Section, (850) 245-2809, jeff.schardt@dep.state.fl.us.

A second example of a submerged vegetation assessment conducted using hydroacoustic technology for the Florida DEP is included in the Appendix.

O. Company Qualifications

Company

ReMetrix is a registered Florida Surveying & Mapping Business (LB7528).

ReMetrix has pioneered and continues to refine new and unique approaches for quantifying aquatic vegetation. For this reason, ReMetrix is ideally skilled and experienced to conduct this project.

ReMetrix was the first company to develop practical techniques for using the BioSonics and U.S. Army Corps of Engineers hydroacoustic vegetation quantification tools. ReMetrix has successfully completed hydroacoustic vegetation monitoring assessments for over 250,000 surface acres of water in seven states. This is by far the most comprehensive use of this system by any organization worldwide.

The company specializes in conducting projects in large study areas. The innovation and accuracy of ReMetrix's assessments have played a key role in many aquatic vegetation management initiatives.

ReMetrix has documented experience of successfully completing projects similar to the one proposed in this RFP. Examples supporting this statement are:

- *Submerged Vegetation Change Analysis for Lake Tohopekaliga, 2001-2005*, conducted for the Florida Department of Environmental Protection, Bureau of Invasive Plant Management
- *Monitoring Aquatic Herbicide Treatment Efficacy, Sacramento-San Joaquin Delta, California*, conducted for the California Department of Boating & Waterways EDCP and the USDA-Agricultural Research Service, 2003-2005.
- *Hydroacoustic Assessment of Pre- and Post-Treatment Vegetation, Houghton Lake, Michigan, 2001-2004*, conducted for the Houghton Lake Improvement Board and the U.S. Army Corps of Engineers – ERDC.
- *Submerged Aquatic Vegetation Multi-Temporal Change Analysis*, conducted for the Big Bear Municipal Water District, CA, 2002-2004.

ReMetrix strives to use trained personnel and the best technology to achieve success in each project. The company endeavors to tailor each project to the known characteristics of the water

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Hydroacoustic Sampling with Species Point Sampling

bodies being monitored. Attention to such details supports the assertion that ReMetrix brings solid expertise to each project from the beginning.

Thank you for considering ReMetrix for this project. Please contact us with any questions.

Sincerely,

Douglas Henderson
Commercial Manager
ReMetrix LLC
(317) 580-8035
doug@remetrix.com

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling

REFERENCES

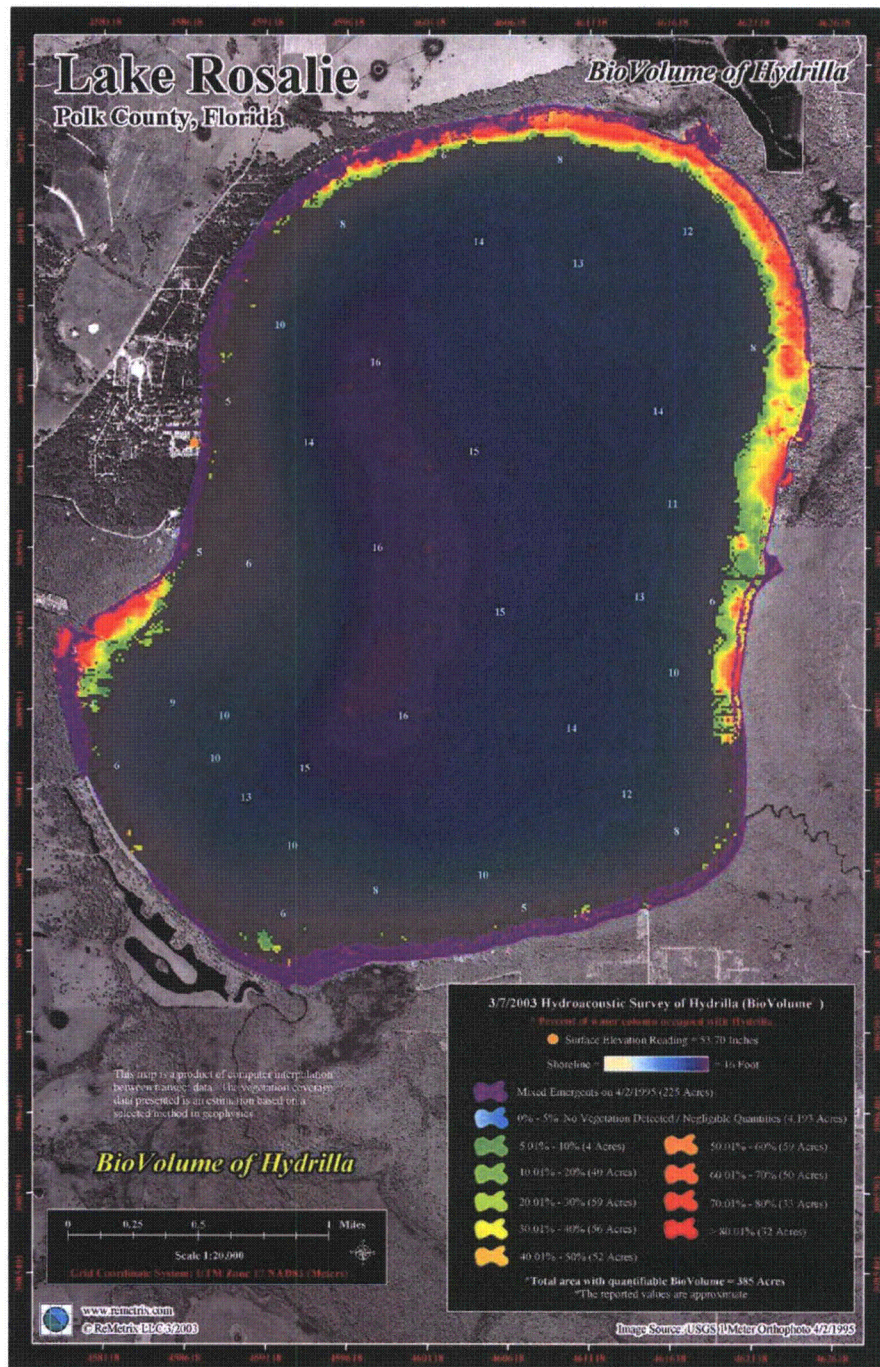
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- Mattson, R., J. A. Derrenbacker, Jr., and R. R. Lewis, 1986. *Effects of thermal addition from the Crystal River generating complex on the submerged macrophytic communities in Crystal Bay, Florida*. In Mahadevan, K., et al., (eds.), *Proceedings: Southeastern Workshop on Aquatic Ecological Effects of Power Generation*, Mote Marine Laboratory Technical Report Number 124, Sarasota, FL, p. 11-67.

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Hydroacoustic Sampling with Species Point Sampling

Appendix:

*An additional example of hydroacoustic
submerged vegetation quantification also used by
the FL DEP*

Seagrass Quantification Plan for Progress Energy Florida, Inc.
Hydroacoustic Sampling with Species Point Sampling



Biovolume map of Lake Rosalie, FL. Biovolume is a measure of plant height in the water column. Biocover maps, which are similar in appearance, indicate the density of plant coverage on the bottom of the water body.



VIA CERTIFIED MAIL

September 17, 2007

Mr. Bala Nori
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

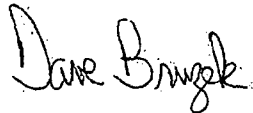
Re: Progress Energy Florida, Inc. – Crystal River Units 1, 2, and 3
NPDES Permit No. FL0000159
Thermal Plume Assessment Plan of Study

Dear Mr. Nori:

Enclosed please find three (3) copies of a draft biological evaluation plan of study (POS) for the Department's review. You'll recall that we agreed to defer submittal of the Crystal River Units 1, 2, and 3 POS pending approval of the Bartow POS. The Bartow POS was subsequently approved by FDEP in late June of this year.

If you or others within FDEP have questions concerning this information, please contact me at (727) 820-5410.

Sincerely,



David A. Bruzek
Lead Environmental Specialist
Progress Energy Florida, Inc.

bcc: Ron Johnson, CN77 (w/att)
Mike Shrader, PEF-903 (w/o att)
Dave Bruzek, PEF-903 (w/o att)
File: CR South\NPDES\Corresp.\2007 (w/att)



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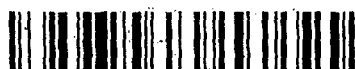
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REFERENCE NUMBER

NAME: June Mooney **TELEPHONE:** 727-830-5548

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Progress Energy Florida
P.O. Box 14042
St. Petersburg, FL 33733

2 EXTREMELY URGENT DELIVERY TO
NAME TELEPHONE

CON: Mr. Bala Nori
STREET: FL Dept. of Environmental Protection
2600 Blair Stone Road
CITY: Tallahassee, FL 32399-2400



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12 THIRD PARTY'S COMPANY NAME
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**PLAN OF STUDY FOR A
THERMAL PLUME ASSESSMENT
CRYSTAL RIVER UNITS 1, 2, and 3
CITRUS COUNTY, FLORIDA**

September 2007

Submitted by:

Progress Energy Florida, Inc.
299 First Avenue North
St. Petersburg, Florida 33701

TABLE OF CONTENTS

1.0	INTRODUCTION AND APPROACH	3
2.0	PLAN OF STUDY	5
2.1	Phase I – Monitoring to Determine the Spatial and Temporal Distribution of the Crystal River Plant Thermal Plume	5
2.1.1	Thermal Plume Delineation	5
2.1.2	Sampling Frequency	6
2.1.3	Environmental Measurements	6
2.1.4	Water Quality Assessment	6
2.1.5	Data Management	6
2.1.6	Data Analysis and Results	6
2.1.7	QA/QC Plan	7
2.1.8	Reporting Requirements	7
2.2	Phase II – Conduct a Biological Assessment of Seagrass Beds and Benthic Macroinvertebrates Impacted From the Thermal Plume	7
2.2.1	Characterization of the Spatial Distribution of Seagrass Beds Likely Affected by the Thermal Plume	7
2.2.2	Characterization of the Benthic Community Potentially Affected by the Thermal Plume	7

LIST OF FIGURES

- Figure 1. Crystal River Plant Site Layout
- Figure 2. Proposed Sampling Locations
- Figure 3. Historical Thermal Plume Profiles

1.0 INTRODUCTION AND APPROACH

As part of the National Pollutant Discharge Elimination System (NPDES) permit for the Crystal River Units 1, 2, and 3, Progress Energy Florida, Inc. (PEF) is required to develop a Plan of Study (POS) in accordance with Rule 62-302.520(1), F.A.C. This plan shall be designed to determine any effects on biological communities from the thermal plume discharge to Crystal Bay. The POS shall address monitoring of the thermal plume, submerged seagrasses, benthic macroinvertebrates, and shall include a proposed implementation schedule and reporting requirements. The POS shall identify data provided by other existing programs as well as any additional monitoring to be conducted by PEF as necessary.

To understand how to characterize potential impacts to seagrass beds and benthic organisms exposed to the thermal release from the Crystal River Energy Complex, this plan of study is structured as a phased approach that will initially focus on determining and understanding the spatial and temporal distribution of the thermal plume under various environmental and plant operating conditions. Once the location of the plume has been established, (Phase I) it will then be possible to determine how and where to evaluate potential impacts to seagrass beds and benthic organisms exposed to the thermal plume (Phase II).

The Crystal River Energy Complex is located on an approximately 5,000 acre site near the Gulf of Mexico in Citrus County, Florida. The Complex is approximately 7.5 miles northwest of the City of Crystal River, within the coastal salt marsh of west central Florida (Figure 1). The complex contains five electric generating units. Units 1 (400 MW) and 2 (500 MW) are coal-fired and Unit 3 (890 MW) is a nuclear-fueled electric generating plant located within the Complex. These three units utilize once-through condenser cooling and are authorized to discharge cooling water by NPDES permit No. FL0000159. Units 4 (640 MW) and 5 (640 MW) are coal-fired units and utilize closed cycle cooling with natural draft cooling towers. Unit 4 and 5 withdraw water for cooling tower makeup from the discharge canal of Units 1, 2, and 3. During certain times of the year (May 1 through October 31), once-through helper cooling towers are operated to reduce the thermal discharge from Units 1, 2, and 3. The helper cooling towers cool a portion of the heated water which has passed through the condensers from Units 1, 2, and 3 and then discharge the cooled water back into the discharge canal. The helper cooling towers are operated as necessary to ensure that the discharge temperature does not exceed the current permit maximum of 96.5 ° F as a three-hour rolling average at the point of discharge into the Gulf of Mexico. Source water for Units 1, 2, and 3 is withdrawn from a common canal located south of the units which extends into the Gulf of Mexico, a Class III marine water.

NPDES Permit No. 0000159 authorizes the following for Crystal River Units 1, 2, and 3:

Operation of an industrial wastewater treatment and disposal system to serve the referenced facility. The facility consists of two fossil-fueled units (Unit #1 and Unit #2) and a nuclear fuel-fired unit (Unit #3). The units have a combined daily flow of 1898 MGD and a total nameplate rating of 1854.8 MW. The facility discharge consists of once-through condenser cooling water, treated auxiliary cooling water, treated-sludge ash water, treated coal pile rainfall runoff, canal debris wash water, and treated non-radioactive wastes/radiation waste. Treated effluent is discharged to the site discharge canal thence to the Gulf of Mexico, a Class III marine water, and a wetland area of the Gulf of Mexico.

The most recent study to evaluate the impact of the thermal plume at Crystal River was conducted in 1983 – 1984. As part of a 316 Demonstration, physical studies were conducted in Crystal Bay to collect data for hydrodynamic and hydrothermal modeling. The models were designed to characterize hydrodynamic conditions within the study area, and using that data, simulate the thermal discharge resulting from the operation of Crystal River Units 1, 2, and 3 under various environmental conditions.

To provide comprehensive, synoptic thermal data, thermographs were deployed at 51 near-surface stations throughout the study area. At 21 of these stations, thermographs were also deployed at subsurface stations for detection of stratification. Meteorological, bathymetric, current, and tide data were also collected in support of the hydro-dynamic modeling effort.

Thermal plume delineation was accomplished during the study period under incoming and outgoing diurnal and semi-diurnal tide conditions. Sampling was conducted during August and January when the in situ study was in progress. Boat crews synoptically sampled four basins near the discharge point measuring conductivity and temperature searching for bottom separation of the thermal plume.

The far-field modeling effort for Crystal River Energy Complex was conducted with CAFÉ-1 and DISPER-1, a pair of two-dimensional finite-element mathematical models developed at the Massachusetts Institute of Technology. The objectives of the far-field modeling were to determine the far-field thermal plume configuration and determine the station effects on far-field meroplankton concentrations (source water body analysis).

The selection of a near-field model for the Crystal River Energy Complex was based upon an examination of the results of the thermal plume delineation surveys. No significant or consistent plume stratification could be detected due either to temperature or salinity. Thus, the near-field modeling was conducted utilizing a model which describes a plume uniformly distributed over the water depth. The results of the near-field model were used to modify the isotherm locations predicted by the far-field model. The far-field model supplied an approximate distribution to the average temperature in the region of the point of discharge and the near-field model provided the detailed distribution.

Upon examination of the thermal plumes obtained from physical data collected, the only phases of the tide which exhibited any substantial near-field behavior were ebb tide and low water slack. Near field behavior was apparent by the existence of locally elongated isotherms which follow and enclose a jet emerging from the point of discharge. Furthermore, data supported the conclusion that heated water is primarily confined to the dredged discharge canal throughout its length, especially at low tide levels. True near-field plume behavior did not begin until the discharge emerged from the channel into the bay (Figure 3).

Thermal plume simulation results agreed well with results from the biological and water quality sampling portions of the 316 study. Basin 1, nearest the point of discharge was consistently exposed to water with temperature elevated 5 – 8 °C above ambient. On ebb or low slack tides, however, the largest volume of the thermal discharge was confined to the dredged channel adjacent to the discharge spoil. The plume at that point tends toward the southwest, but rapidly becomes well mixed in the relatively shallow water. On flood or high tides, the plume effect is lacking as the discharge spreads quickly over more of the bay. Little variation was seen in the summer or winter cases. Simulations represented worst case, full load operation. Interpretation of the results was complicated by low salinity and sedimentation experienced in Crystal Bay. Particularly with benthic communities, the effects of salinity and sedimentation are very similar to thermal effects, and this was demonstrated by faunal similarities observed between northern area stations and those in area affected by the thermal discharge.

As a result of findings from this study, Florida Power Corporation reached a tentative agreement with the U. S. Environmental Protection Agency (EPA) and Florida Department of Environmental Regulation (FDER) in March 1988 outlining a 3-phased approach towards mitigating impacts from the once-through cooling water system at Units 1, 2, and 3. FPC agreed to install helper cooling towers to reduce thermal impacts, construct and operate a multi-species fish hatchery to address impingement and entrainment impacts, and implement a 15% reduction in overall cooling water flow from November 1 through April to further reduce impingement and entrainment impacts.

Four mechanical draft helper cooling towers designed to cool approximately one-half the condenser cooling water discharged from Crystal River Units 1, 2, and 3 were installed and began operation in 1993. The cooler tower discharge water is reintroduced and mixed in the discharge canal to achieve a three hour average maximum temperature of 96.5 °F at the point of discharge.

2.0 PLAN OF STUDY

The objective of this POS is to assess the potential impacts of the thermal plume from current operation of Crystal River Units 1, 2, and 3 on submerged grasses, benthic macroinvertebrates, and other aquatic species, as appropriate. This POS is divided into the following phases and sections:

2.1 Monitoring to Determine the Spatial and Temporal Distribution of the Crystal River Energy Complex Thermal Plume

The objective of this phase is to understand the spatial persistence and temporal distribution of the thermal plume as it relates to current plant operations and ambient environmental conditions.

2.1.1 Thermal Plume Delineation

Earlier physical studies provided detailed near-field and far-field thermal plume simulations correlated with extensive physical data collected in and around Crystal Bay. A fairly accurate account of thermal plume spatial and temporal performance was determined from those studies. However, those studies were completed prior to the installation and operation of the helper cooling towers and the resulting NPDES permit condition of a maximum thermal discharge temperature of 96.5 ° F as a three-hour rolling average at the point of discharge into the Gulf of Mexico.

This POS is designed to assess the spatial distribution of the thermal plume resulting from the operation of Crystal River Units 1, 2, and 3 and helper cooling towers. To map the spatial distribution of the thermal plume a total of 20 sampling stations will be synoptically monitored twice monthly from April through October. Sampling station locations are shown in Figure 2 and are based in part on expected plume trajectories from model simulations run during the previous 316 study. Exact station locations will be determined during the first field effort using GPS. Station location is grid based to enhance statistical analysis and interpolation. Each synoptic survey will take place prior to slack water for both ebb and flood tidal cycles. Surface and bottom temperature, dissolved oxygen, and salinity measurements will be taken at each station. Secchi disc depth will be determined at each station as a measure of light penetration. If water depth at a sampling site is less than one meter, only surface (0.2m) measurements will be taken.

To supplement the synoptic surveys three continuous recorders (datasonde) will be placed at key locations to measure temperature, dissolved oxygen, and salinity 24 hours prior to and after each synoptic survey. A fourth datasonde will be placed as a control south of Crystal Bay outside of the area influenced by the thermal plume. Datasondes will be suspended near the bottom through bottom anchoring and surface floats. The datasondes will be programmed to record data every 15 minutes. The datasondes will provide a continuous record of temperature, salinity, and dissolved oxygen concentrations during each survey period for areas that are expected to be within the thermal plume, as well as a control.

The objective of this study will be to characterize the fate of the thermal plume under present plant operating conditions. The mapping effort will include the establishment of isotherms associated with the thermal plume. The gradient of thermal contours will provide data to establish areas within and outside of the thermal plume, allow comparison to previous modeling results, and dictate location of biological sampling stations. If conditions are encountered that indicate

the proposed stations will not allow an adequate delineation of the thermal plume, select stations will be moved or additional stations will be added for adequate temperature mapping.

2.1.2 Sampling Frequency

Synoptic surveys will be conducted twice monthly from April through October during slack low and high tides in order to collect data during worst case, full power demand conditions. This will provide information on the effect of plant operating conditions including worst case on the fate of the thermal plume. Sampling will begin just prior to a slack flood or ebb tide. It is anticipated that sampling will begin in the spring of 2008 pending approval of this POS by the FDEP.

2.1.3 Environmental Measurements

Concurrent with each survey air temperature, wind speed, direction, rainfall, cloud cover and general weather conditions will be observed and recorded. Meteorological data will be obtained from the meteorological tower operated on the Crystal River Energy Complex site. Also, tide height data will be recorded, and plant operational parameters will be collected for each sampling event.

2.1.4 Water Quality Assessment

In addition to synoptic water quality sampling (temperature, dissolved oxygen, and salinity), mid-depth water samples will be collected once per tidal cycle and once per month at five stations. These samples will be analyzed for dissolved organic carbon, ortho-phosphate, nitrate/nitrite, ammonia, and turbidity. Methods and holding times will follow appropriate 40 CFR Part 136 and FDEP SOP guidelines. Stations to be sampled for water quality parameters are shown in Figure 3.

2.1.5 Data Management

Field and laboratory data sheets will be used to record raw data. All field data will be entered into an ACCESS database with identifiers of station, date, and depth to allow for full analysis of data.

2.1.6 Data Analysis and Results

To determine the fate of the thermal plume under various plant and environmental conditions, data from April through October will be collected and analyzed. Isothermal contours will be generated for 1.0 °C isotherms. Since previous studies indicated little vertical stratification, isotherms will be considered to be consistent throughout the water column.

These isotherms will be compared to near-field isotherms generated during the 1985 316 Demonstration Study. With no significant changes in hydrology or topography it may be possible to compare results from this study to prior conclusions. This will be determined as data becomes available.

The datasonde results will be used to provide information on temperature and dissolved oxygen concentrations at selected areas during periods that bracket the surveys. A comparison will be made between day and night dissolved oxygen concentrations to assess any temperature-dissolved oxygen interactions.

To supplement the thermal plume mapping and assist in determining what additional studies, if any, will be required to evaluate the impact of the existing thermal plume on seagrass beds, available GIS data and maps will be collected and layered with thermal plume data.

In addition, the isotherm mapping will provide data to identify if, and where, benthic sampling should be conducted to be representative of the various temperature contours, as well as identify

background temperature areas for comparative purposes. It will also be used to assess the relevancy of the 1985 benthic studies to current isotherm distributions.

2.1.7 QA/QC Plan

It is the policy of the EHSS Department to ensure that all biological activities (field, laboratory, and reporting) are accurate, complete, and repeatable. This policy is accomplished by developing a system of activities outlined in the EHSS Biology Program QA Manual. This manual includes both administrative and technical activities. Vendors performing biological studies for EHSS must comply with the criteria and guidance outlined in the QA manual.

2.1.8 Reporting Requirements

Progress reports will be issued quarterly and will present thermal plume mapping information for temperature, salinity, and dissolved oxygen along with water quality information that is available.

A final report will be prepared within 6 months of the last sampling to discuss the fate of the thermal plume, the assessment of potential biological impacts from available information and recommendations for Phase II sampling.

2.2 Phase II – Conduct a Biological Assessment of Seagrass Beds and Benthic Macroinvertebrates Impacted from the Thermal Plume

2.2.1 Characterization of the Spatial Distribution of Seagrass Beds Likely Affected by the Thermal Plume

The scope of this study will be deferred until the spatial and temporal extent of the thermal plume is defined and an appropriate Plan of Study can be prepared and submitted to FDEP for approval.

2.2.2 Characterization of the Benthic Community Potentially Affected by the Thermal Plume

The scope of this study will be deferred until the spatial and temporal extent of the thermal plume is defined and an appropriate Plan of Study can be prepared and submitted to FDEP for approval.

Figure 1.

Site Layout

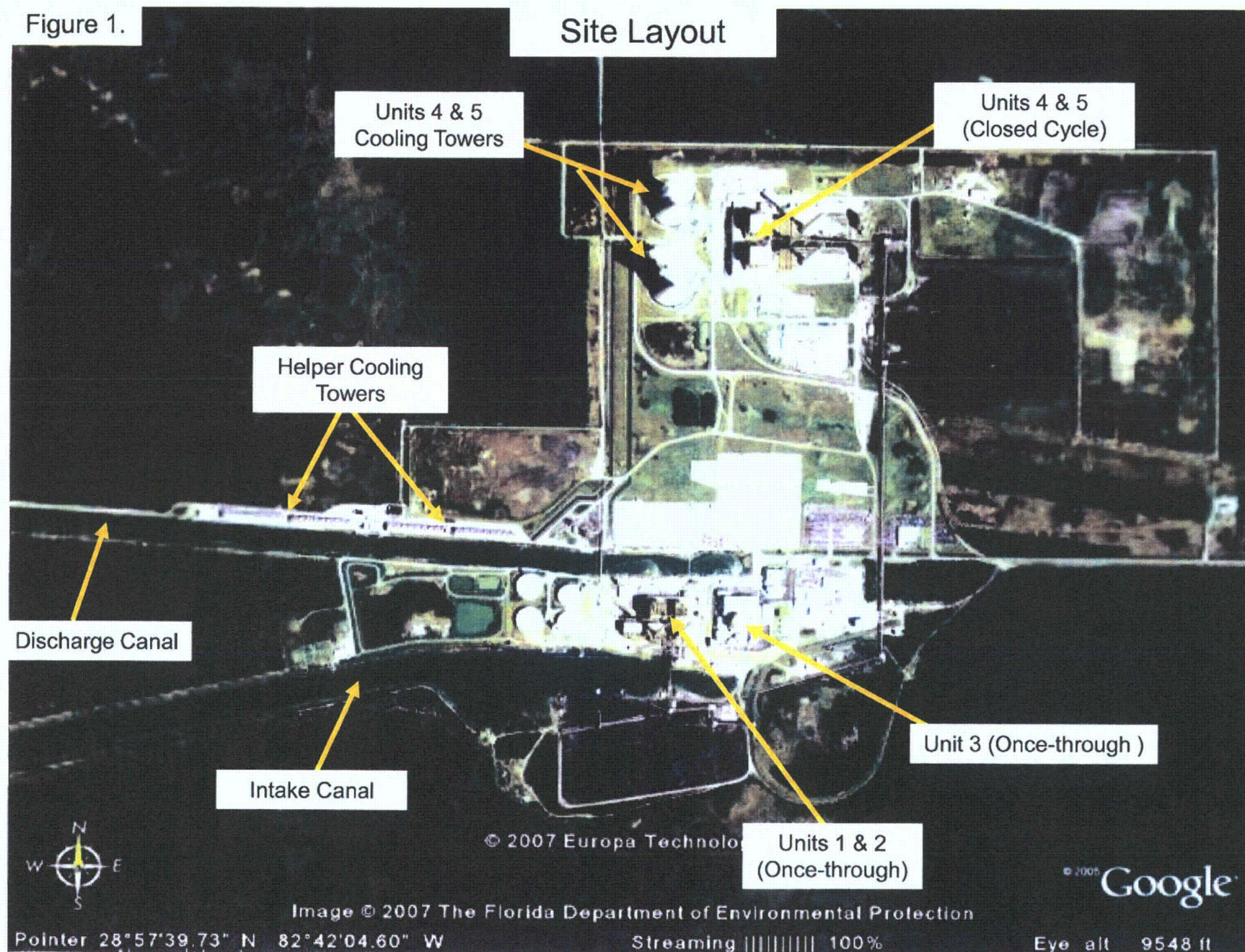


Figure 2.

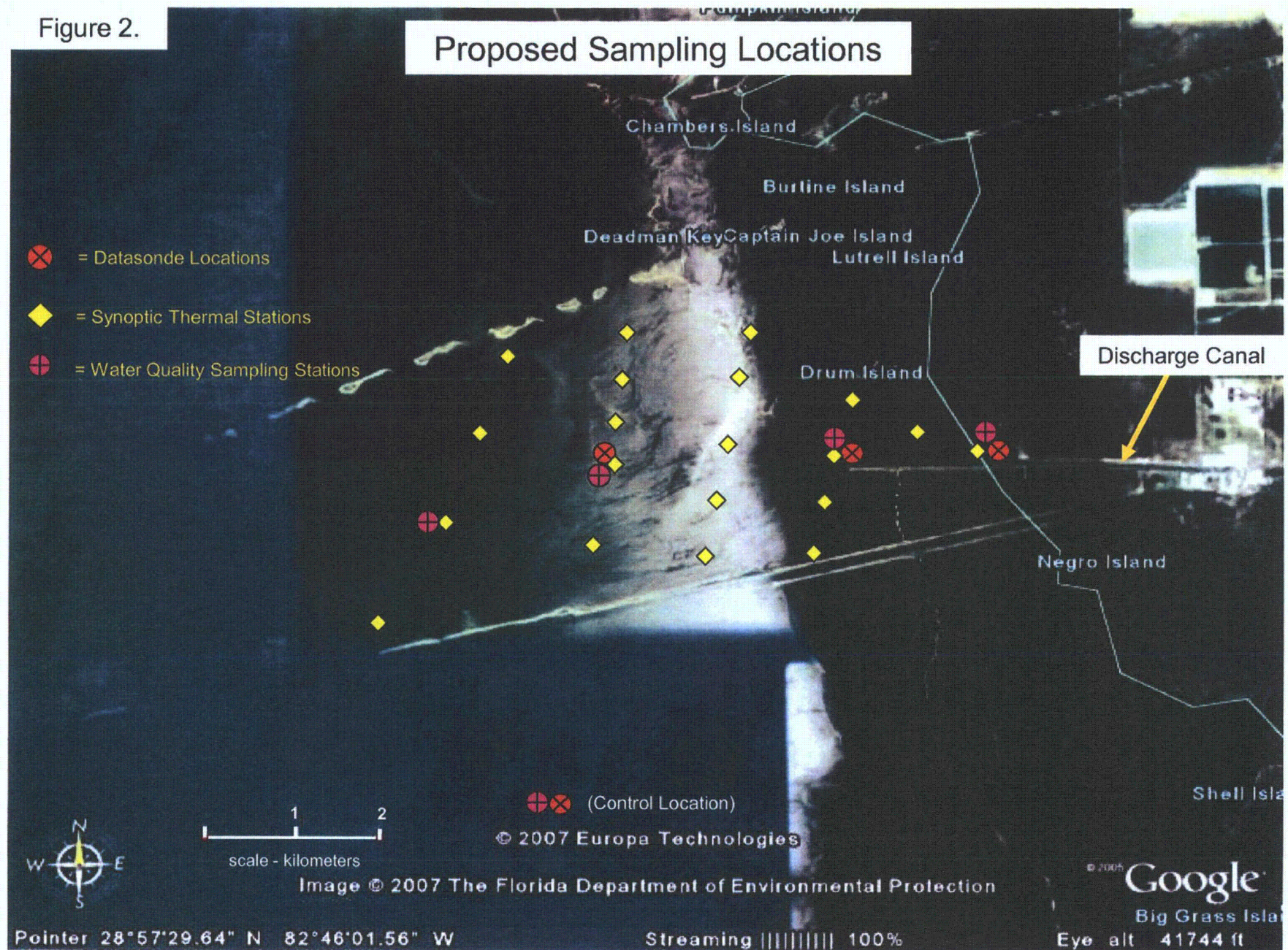
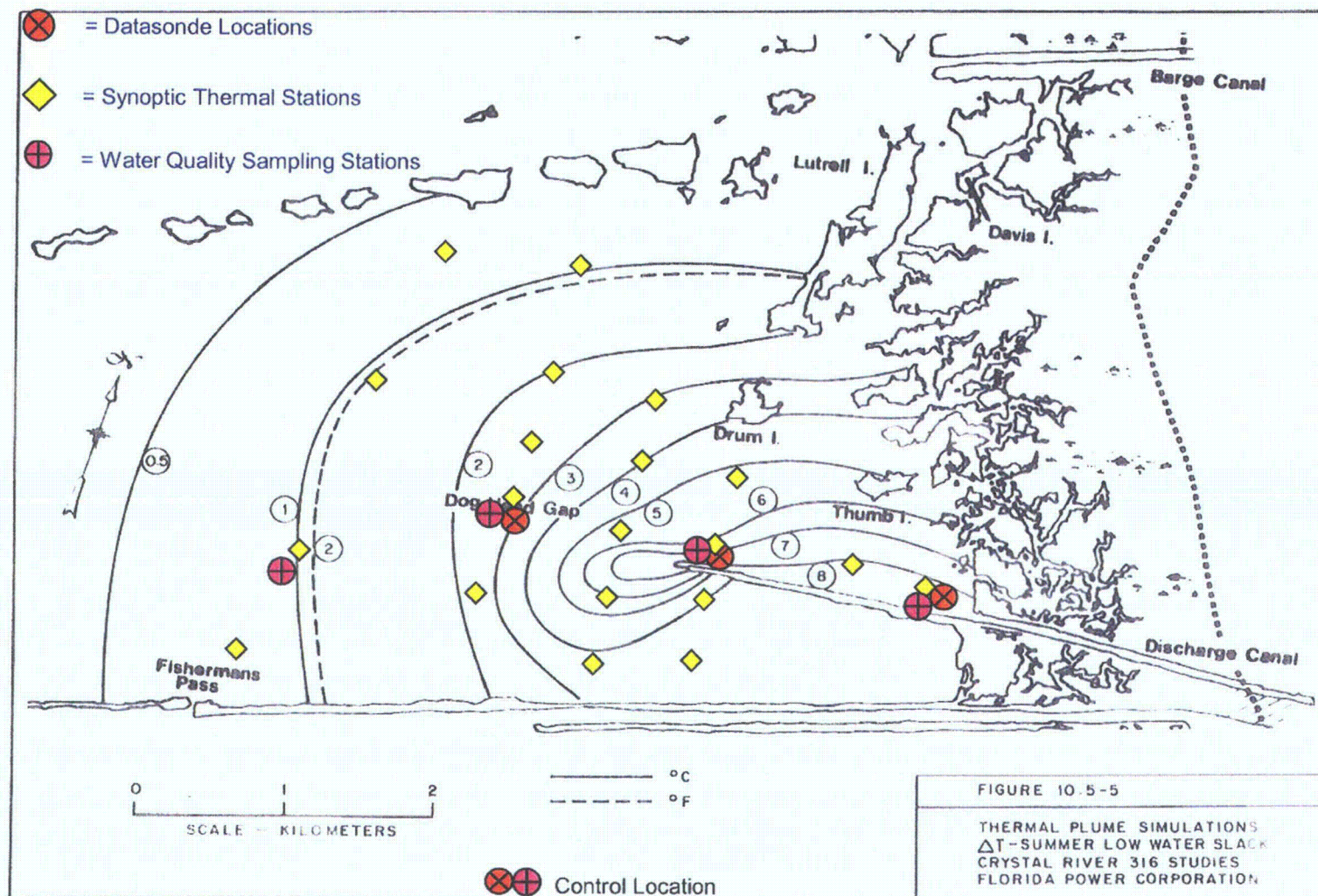


Figure 3.

Historical Thermal Plume Profiles





WASTEWATER FACILITY OR ACTIVITY PERMIT APPLICATION FORM 1 GENERAL INFORMATION

I - IDENTIFICATION NUMBER:

Facility ID FL0000159

II - CHARACTERISTICS:

INSTRUCTIONS: Complete the questions below to determine whether you need to submit any permit application forms to the Department of Environmental Protection. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the blank in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements. See Section B of the instructions. See also, Section C of the instructions for definitions of the terms used here.

SPECIFIC QUESTIONS	YES	NO	FORM ATTACHED
A. Is this facility a domestic wastewater facility which results in a discharge to surface or ground waters?		X	
B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters?		X	
C. Does or will this facility (other than those describe in A. or B.) discharge process wastewater, or non-process wastewater regulated by effluent guidelines or new source performance standards, to surface waters?	X		2CS
D. Does or will this facility (other than those described in A. or B.) discharge process wastewater to ground waters?	X		N/A
E. Does or will this facility discharge non-process wastewater, not regulated by effluent guidelines or new source performance standards, to surface waters?		X	
F. Does or will this facility discharge non-process wastewater to ground waters?	X		N/A
G. Does or will this facility discharge stormwater associated with industrial activity to surface waters?	X		2F
H. Is this facility a non-discharging/closed loop recycle system?		X	
I. Is this facility a public water system whose primary purpose is the production of potable water for public consumption and which discharges demineralization concentrate to surface water or groundwater?		X	

III - NAME OF FACILITY: (80 characters and spaces)

Crystal River Power Plant Units 1, 2, 3

IV - FACILITY CONTACT: (A. 30 characters and spaces)

A. Name and Title (Last, first, & title)	B. Phone (area code & no.)
Yowell, Douglas W.	727-820-5228

V - FACILITY MAILING ADDRESS: (A. 30 characters and spaces; B. 25 characters and spaces)

A. Street or P.O. Box: P.O. Box 14042, PEF-903		
B. City or Town: St. Petersburg	State: FL	Zip Code: 33733

VI - FACILITY LOCATION: (A. 30 characters and spaces; B. 24 characters and spaces; C. 3 spaces (if known); D. 25 characters and spaces; E. 2 spaces; F. 9 spaces)

A. Street, Route or Other Specific Identifier: 15760 W. Powerline St.		
B. County Name: Citrus	C. County Code (if known):	
D. City or Town: Crystal River	E. State: FL	F. Zip Code: 34428

VII - SIC CODES: (4-digit, in order of priority)

1. Code #: 4911	(Specify) Electric Svc.	2. Code #:	(Specify)
3. Code #:	(Specify)	4. Code #:	(Specify)

VIII - OPERATOR INFORMATION: (A. 40 characters and spaces; B. 1 character; C. 1 character (if other, specify); D. 12 characters; E. 30 characters and spaces; F. 25 characters and spaces; G. 2 characters; H. 9 characters)

A. Name: Progress Energy Florida, Inc		B. Is the name in VIII A. the owner? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
C. Status of Operator: F = Federal; S = State; P = Private; O = Other; M = Public (other than F or S)	(code) P	(specify) Utility	D. Phone No.: 352-563-4484
E. Street or P. O. Box: 15760 W. Powerline St.			
F. City or Town: Crystal River		G. State: FL	H. Zip Code: 34428

IX - INDIAN LAND:

A. Is the facility located on Indian lands?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
---	---

X - EXISTING ENVIRONMENTAL PERMITS:

A. NPDES Permit No.	B. UIC Permit No.	C. Other (specify)	D. Other (specify)
FL0000159	N/A	FLA016960 - IWW	FLA118753 - DWW

XI - MAP: Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII - NATURE OF BUSINESS (provide a brief description)

Crystal River Units 1 & 2 are coal-fired steam electric generating facilities.

Crystal River Unit 3 is a nuclear-powered steam electric generating facility.

XIII - CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the 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.

Larry Hatcher

A. Name (type or print)

Manager, CR Fossil Plants

Official Title (type or print)

Larry E. Hatcher

B. Signature

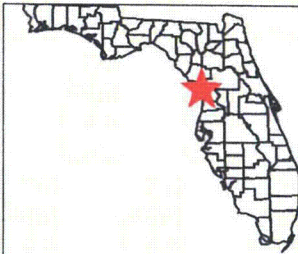
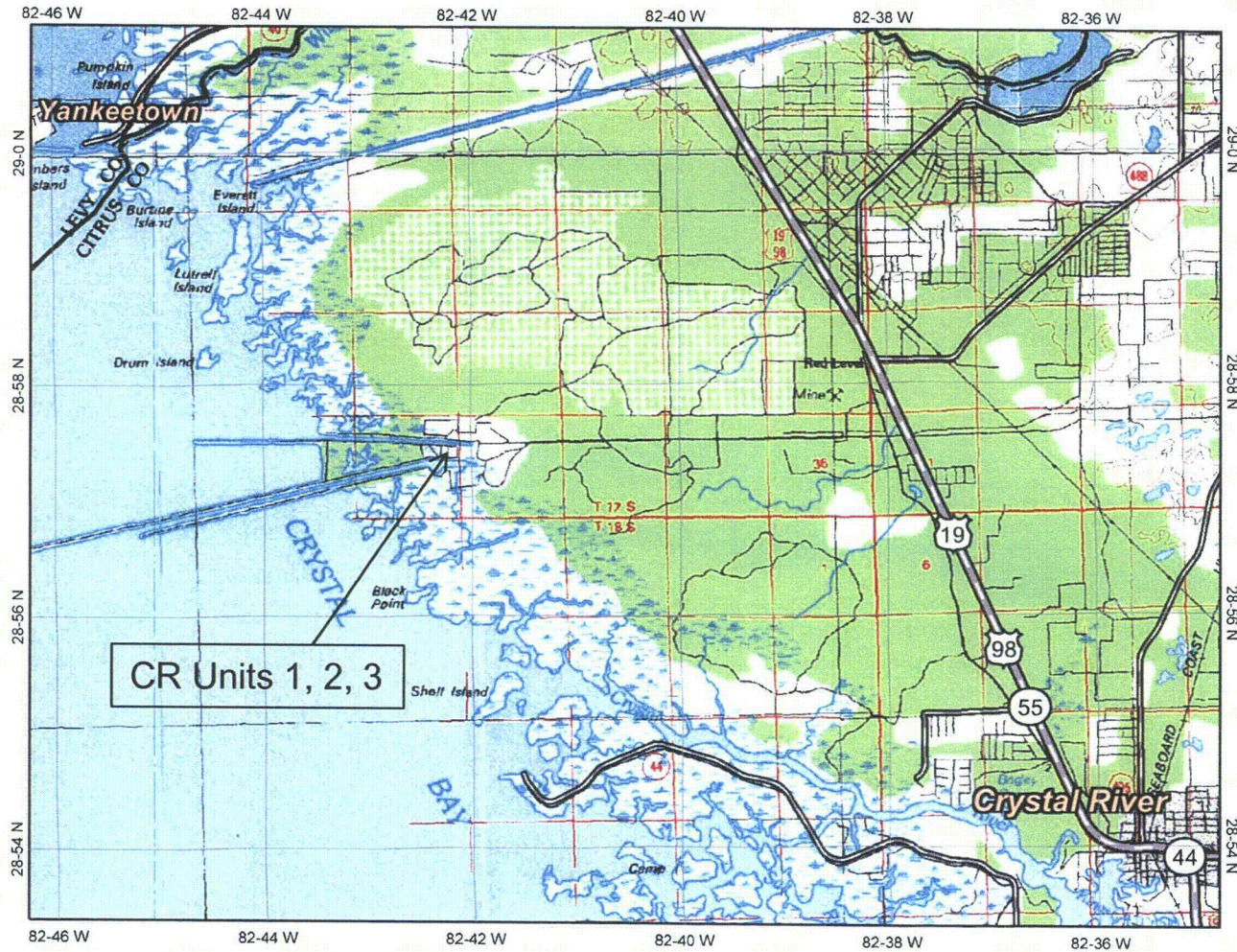
10/26/09

C. Date Signed

Form 1, Section XI - Maps



CR123 NPDES Permit No. FL0000159



Legend

- Interstates
- US Highways
- State Highways
- County Roads
- Local Roads
- Cities (census places)
- Counties (generalized)



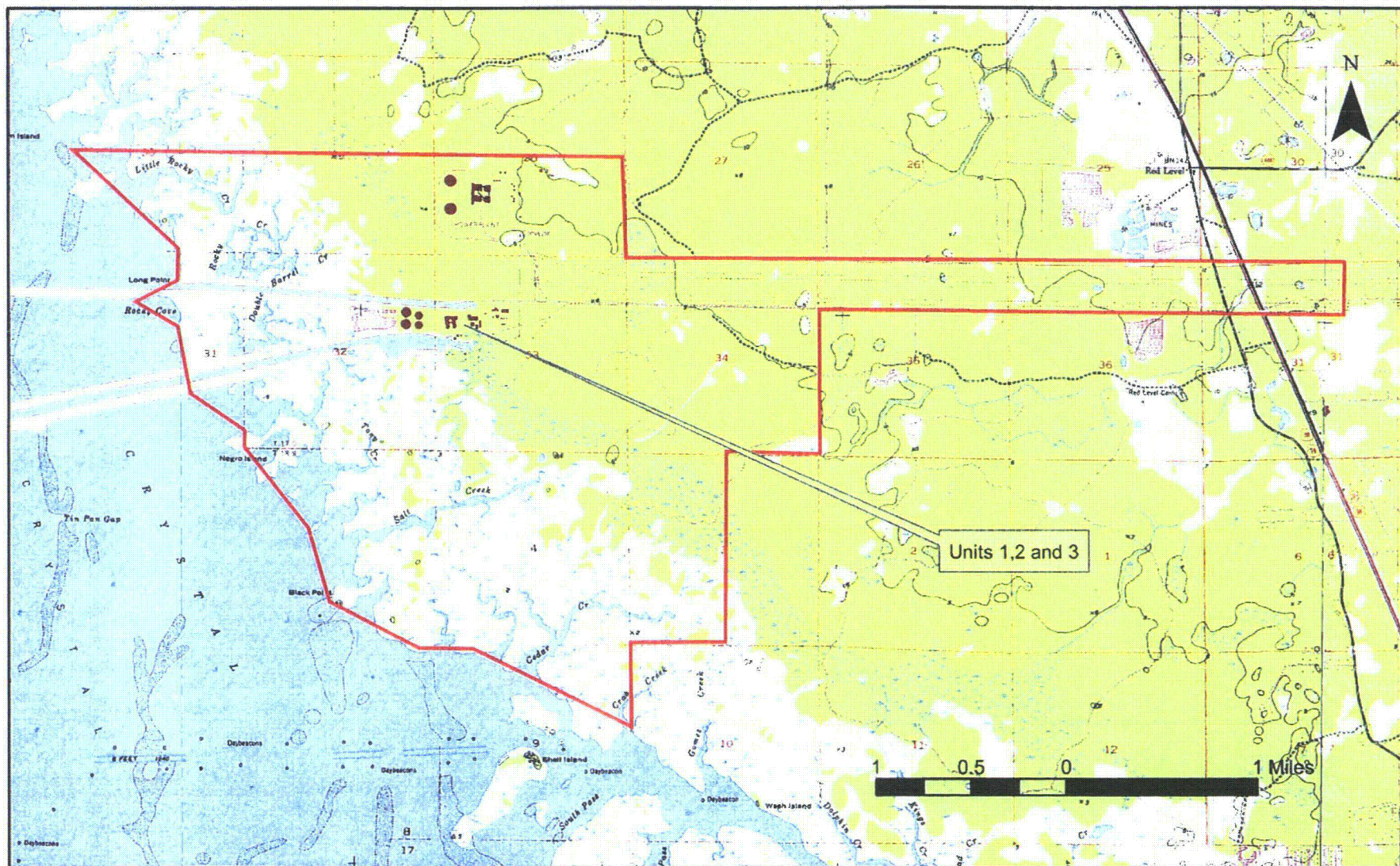
Scale: 1:100,000

[Florida Department of Environmental Protection] Disclaimer: This map is intended for display purposes only. It was created using data from different sources collected at different scales, with different levels of accuracy, and/or covering different periods of time.

Notes: Map produced on Tue Sep 29 11:25:06 EDT 2009

Map center: 528893, 550366

Attachment 1 - Crystal River Energy Complex Property Boundary - FL0000159



U.S.G.S. Red Level Quadrangle

FORM 2CS



WASTEWATER APPLICATION FOR PERMIT TO DISCHARGE PROCESS WASTEWATER FROM NEW OR EXISTING INDUSTRIAL WASTEWATER FACILITIES TO SURFACE WATERS

Facility I.D. Number: FL0000159

Please print or type information in the appropriate areas.

I OUTFALL LOCATION For each outfall, list the X,Y coordinates and the name of the receiving water.
(latitude/longitude to the nearest 15 seconds)

A. Outfall No. (List)	B. Latitude			C. Longitude			D. Name of Receiving Water
	Deg.	Min.	Sec.	Deg.	Min.	Sec.	
D-011	28	57	31.1	82	42	00.7	Discharge Canal then to Crystal Bay
D-012	28	57	31.1	82	42	02.5	Discharge Canal then to Crystal Bay
D-013	28	57	31.2	82	41	54.5	Discharge Canal then to Crystal Bay
D-091	28	57	24.0	82	42	00.4	Intake Canal then to Discharge Canal
D-092	28	57	23.2	82	42	01.9	Intake Canal then to Discharge Canal
D-093	28	57	21.6	82	41	56.2	Intake Canal then to Discharge Canal
NA	-	-	-	-	-	-	intentionally left blank

II OUTFALL DESIGN

A. Outfall No. (List)	B. Design Configuration and Construction Materials	C. Distance from shore	D. Diameter	E. Elevation of Discharge Invert (MSL)	F. Receiving Water Depth at POD (MSL)
D-011	(4) Fiberglass Pipes	6 ft.	6 ft.	- 5 ft.	- 12 ft.
D-012	(4) Fiberglass Pipes	6 ft.	6 ft.	- 5 ft.	- 12 ft.
D-013	(4) Concrete Pipes	0 ft.	7.5 ft.	- 8 ft.	- 12 ft.
D-091	(1) Concrete Pipe	2 ft.	2 ft.	+ 2 ft.	- 20 ft.
D-092	(1) Fiberglass Pipe	3 ft.	1 ft.	- 1 ft.	- 20 ft.
D-093	(1) Steel Pipe	0 ft.	18 in.	- 4 ft.	- 20 ft.

FORM 2CS



WASTEWATER APPLICATION FOR PERMIT TO DISCHARGE PROCESS WASTEWATER FROM NEW OR EXISTING INDUSTRIAL WASTEWATER FACILITIES TO SURFACE WATERS

Facility I.D. Number: FL0000159

Please print or type information in the appropriate areas.

I OUTFALL LOCATION For each outfall, list the X,Y coordinates and the name of the receiving water.
(latitude/longitude to the nearest 15 seconds)

A. Outfall No. (List)	B. Latitude			C. Longitude			D. Name of Receiving Water
	Deg.	Min.	Sec.	Deg.	Min.	Sec.	
D-0C1	28	57	34.3	82	42	27.4	Discharge Canal then to Crystal Bay
D-0C2R	28	57	23	82	42	30	Intake Canal
D-00F	28	57	31.5	82	41	56.5	Discharge Canal then to Crystal Bay
I-0FG	28	57	31.5	82	41	56.5	Internal Outfall through D-00F
I-0FE	28	57	31.5	82	41	56.5	Internal Outfall through D-00F
D-00H	28	57	08.8	82	42	12.7	To marshland then to Crystal Bay
N/A	-	-	-	-	-	-	intentionally left blank

II OUTFALL DESIGN

A. Outfall No. (List)	B. Design Configuration and Construction Materials	C. Distance from shore	D. Diameter	E. Elevation of Discharge Invert (MSL)	F. Receiving Water Depth at POD (MSL)
D-0C1	(3) Concrete Pipes	8 ft.	30 in.	- 2 ft.	- 12 ft.
D-0C2	(1) RCP	approx. 60 ft.	24 in.	7.67 ft.	- 20 ft.
D-00F	(2) Concrete Pipes	0 ft.	4 ft.	- 9 ft.	- 12 ft.
I-0FG	Tank that discharges internally to D-00F	N/A	4 in.	N/A	Internal Outfall
I-0FE	(2) tanks that discharge internally to D-00F	N/A	2.5 in.	N/A	Internal Outfall
D-00H	(2) Steel Pipes	N/A	2 ft.	unk.	N/A

FORM 2CS



WASTEWATER APPLICATION FOR PERMIT TO DISCHARGE PROCESS WASTEWATER FROM NEW OR EXISTING INDUSTRIAL WASTEWATER FACILITIES TO SURFACE WATERS

Facility I.D. Number: FL0000159

Please print or type information in the appropriate areas.

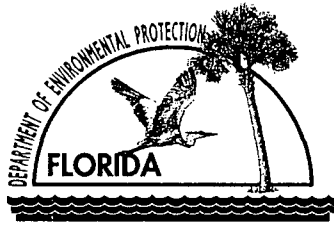
I OUTFALL LOCATION For each outfall, list the X,Y coordinates and the name of the receiving water.
(latitude/longitude to the nearest 15 seconds)

A. Outfall No. (List)	B. Latitude			C. Longitude			D. Name of Receiving Water
	Deg.	Min.	Sec.	Deg.	Min.	Sec.	
D-071	28	57	34.2	82	42	32.5	Discharge Canal then to Crystal Bay
D-072	28	57	35.2	82	42	48.8	Discharge Canal then to Crystal Bay
D-094	28	57	34.4	82	42	30.4	Discharge Canal then to Crystal Bay
New HCT	28	57	31	82	42	29	Discharge Canal then to Crystal Bay
New HCT	28	57	22	82	42	31	Intake Canal (alt. flowpath)
New HCR SB	28	57	32	82	42	30	Discharge Canal then to Crystal Bay
N/A	-	-	-	-	-	-	intentionally left blank

II OUTFALL DESIGN

A. Outfall No. (List)	B. Design Configuration and Construction Materials	C. Distance from shore	D. Diameter	E. Elevation of Discharge Invert (MSL)	F. Receiving Water Depth at POD (MSL)
D-071	Concrete Trough	50 ft.	24 ft.	- 3 ft.	- 12 ft.
D-072	Concrete Trough	50 ft.	24 ft.	- 3 ft.	- 12 ft.
D-094	Concrete Pipe	1 ft.	24 in.	+ 2 ft.	- 12 ft.
New HCT Disch.	Concrete Flume to CR123 Discharge Canal	0 ft.	20 ft.	0 ft.	- 12 ft.
New HCT Disch.	Concrete Flume to CR123 Intake Canal	0 ft.	20 ft.	0 ft.	- 20 ft.
New HCT Scrn. Bwsh.	HDPE Pipe	0 ft.	24 in.	+ 1 ft.	- 12 ft.

FORM 2CS



WASTEWATER APPLICATION FOR PERMIT TO DISCHARGE PROCESS WASTEWATER FROM NEW OR EXISTING INDUSTRIAL WASTEWATER FACILITIES TO SURFACE WATERS

Facility I.D. Number: FL0000159

Please print or type information in the appropriate areas.

I OUTFALL LOCATION For each outfall, list the X,Y coordinates and the name of the receiving water.
(latitude/longitude to the nearest 15 seconds)

A. Outfall No. (List)	B. Latitude			C. Longitude			D. Name of Receiving Water
	Deg.	Min.	Sec.	Deg.	Min.	Sec.	
New B5b Dis.	28	57	21.8	82	41	54.5	Intake Canal then to Discharge Canal

II OUTFALL DESIGN

A. Outfall No. (List)	B. Design Configuration and Construction Materials	C. Distance from shore	D. Diameter	E. Elevation of Discharge Invert (MSL)	F. Receiving Water Depth at POD (MSL)
New B5b Pump Disch.	Stainless Steel pipe	0 ft.	5-in.	+ 8 ft.	- 20 ft.

RECEIVING WATER INFORMATION

For each surface water that will receive effluent, supply the following information:

A. Name of Receiving Water	B. Check One		C. Classification (See Ch. 62-302, F.A.C.)	D. Type of Receiving Water (canal, river, lake, etc.)
	Fresh	Salt or Brackish		
Crystal Bay	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Class III	Gulf
Intake Canal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Class III	Canal
	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		

E. Minimum 7-day 10-year low flow of the receiving water at each outfall (if appropriate).

F. Identify and describe the flow of effluent from each outfall to a major body of water. A suitably marked map or aerial photograph may be used.

G. Do you request a mixing zone under Rule 62-4.244, F.A.C.? If yes, for what parameters or pollutants?

FLows, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B.

B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of:

1. All operations contributing wastewater to the effluent; including process wastewater, sanitary wastewater, cooling water, and stormwater runoff;
2. The average flow contributed by each operation; and
3. The treatment received by the wastewater.

Use the space on the next page. Continue on additional sheets, if necessary.

(1) Outfall No. (List)	(2) Operation(s) Contributing Flow		(3) Treatment		
	(a) Operation (list)	(b) Avg. Flow & Units	(a) Description	(b) List Code from Table 2CS-1	
D-011	Once through cond. cooling water	446.4 mgd	(see attachment 4)	4-A	2F
D-012	Once through cond. cooling water	472.3 mgd	(see attachment 4)	4-A	2F
D-013	Once through cond. cooling water	985.0 mgd	(see attachment 4)	4-A	2-F/H
				XX	
D-091	Unit 1 intake screen wash water	3.11 mgd	(see attachment 4)	4-A	1-T
D-092	Unit 2 intake screen wash water	3.11 mgd	(see attachment 4)	4-A	1-T
D-093	Unit 3 intake screen wash water	5.3 mgd	(see attachment 4)	4-A	1-T
D-0C1	FGD Blowdown/Stormwater	Intermittent	(see attachment 4)	1-U	1-Y
	Emergency Outfall			4-A	

(1) Outfall No. (List)	(2) Operation(s) Contributing Flow		(3) Treatment		
	(a) Operation (list)	(b) Avg. Flow & Units	(a) Description	(b) List Code from Table 2CS-1	
D-0C2	Plant IWW Treatment Pond Overflow	Intermittent	(see attachment 4)	1-U	1-Y
				4-A	
D-00F	Heat Decay System - Once through	50.6 mgd	(see attachment 4)	4-A	2-F/H
	non-contact cooling water	0.016 mgd	(ECST Discharge)	2-J	
	(includes ECST & CD internal discharges)	0.015 mgd	(CD Discharge)	2-K	
I-0FG	Secondary Drain Tank (SDT)	0.8 mgd	(see attachment 4)	1-Q	2-K
				1-O	XX
I-0FE	Laundry & Shower Sump Tank	0.0134 mgd	(see attachment 4)	2-K	1-Q
D-00H	Coal Pile Runoff	Intermittent	(see attachment 4)	1-U	1-Y
				4-A	
D-071	Helper Cooling Tower once-through	494.64 mgd	(see attachment 4)	2-F	4-A
	cooling water				
D-072	Helper Cooling Tower once-through	494.64 mgd	(see attachment 4)	2-F	4-A
	cooling water				

(1) Outfall No. (List)	(2) Operation(s) Contributing Flow		(3) Treatment		
	(a) Operation (list)	(b) Avg. Flow & Units	(a) Description	(b) List Code from Table 2CS-1	
D-094	Helper Cooling Tower	3.11 mgd	(see attachment 4)	4-A	1-T
	intake screen wash water				
New	EPU Helper CT Discharge	460.8 mgd	(see attachment 4)	4-A	
	(discharge canal)				
New	EPU Helper CT Discharge	308.2 mgd	(see attachment 4)	4-A	
	(intake canal)				
New	EPU Helper CT Intake Screen	1.42 mgd	(see attachment 4)	4-A	1-T
	Backwash				
New	B.5.b. Backup Pump Test Discharge	0.009 mgd	(see attachment 4)	4-A	

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☒ Yes (complete the following table) ☐ No (go to D. below)

(1) Outfall No. (List)	(2)Operation(s) Contributing Flow(List)	(3) Frequency		(4) Flow				
		(a) Days per Week (specify avg.)	(b) Months per Yr. (specify avg.)	(a) Flow Rate (in mgd)		(b) Total Volume (specify with units)		(c) Duration (in days)
				Long Term Avg.	Max. Daily	Long Term Avg.	Max. Daily	
D-0C1	FGD Blowdown/Stormwater Emergency Overflow	unk.	< 1	N/A	N/A	N/A	N/A	N/A
D-0C2R	IWW Treatment Pond Overflow	unk.	< 1	N/A	N/A	N/A	N/A	N/A
D-00H	Coal Pile runoff	unk.	< 1	N/A	N/A	N/A	N/A	N/A
D-071	Helper Cooling Tower once-through cooling water	7	6	494.64	494.64	89,035.2 mg	89,035.2 mg	180
D-072	Helper Cooling Tower once-through cooling water	7	6	494.64	494.64	89,035.2 mg	89,035.2 mg	180
D-094	Helper Cooling Tower Intake Screen Backwash	7	6	3.11	3.11	559.8 mg	559.8 mg	180
N/A	(intentionally left blank)	-	-	-	-	-	-	-

D. Describe practices to be followed to ensure adequate wastewater treatment during emergencies such as power loss and equipment failures causing shutdown of pollution abatement equipment of the proposed/permitted facilities.

E. List the method(s) and location(s) of flow measurement.

PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☒ Yes (complete Item V-B) ☐ No (go to Section VI)

B. Are the limitations in the applicable guideline expressed in terms of production (or other measure of operation)?

☐ Yes (complete Item V-C) ☒ No (go to Section VI)

C. If you answered "yes" to Item V-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. Affected Outfalls (list outfall nos.)
a. Quantity per Day	b. Units of Measure	c. Operation, Product, Materials, Etc. (specify)	
N/A			

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☒ Yes (complete the following table) ☐ No (go to D. below)

(1) Outfall No. (List)	(2)Operation(s) Contributing Flow(List)	(3) Frequency		(4) Flow				
		(a) Days per Week (specify avg.)	(b) Months per Yr. (specify avg.)	(a) Flow Rate (in mgd)		(b) Total Volume (specify with units)		(c) Duration (in days)
				Long Term Avg.	Max. Daily	Long Term Avg.	Max. Daily	
New	New EPU Cooling Tower Discharge to CR123 Discharge Canal	7						
New	New EPU Cooling Tower Discharge to CR123 Intake Canal	7						
New	B.5.b Backup Pump Test Discharge	1	6	0.009	0.009	300 gpm for 30 min	300 gpm for 30 min	1 day every other month

D. Describe practices to be followed to ensure adequate wastewater treatment during emergencies such as power loss and equipment failures causing shutdown of pollution abatement equipment of the proposed/permitted facilities.

E. List the method(s) and location(s) of flow measurement.

PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ Yes (complete Item V-B) ☐ No (go to Section VI)

B. Are the limitations in the applicable guideline expressed in terms of production (or other measure of operation)?

☐ Yes (complete Item V-C) ☐ No (go to Section VI)

C. If you answered "yes" to Item V-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. Affected Outfalls
a. Quantity per Day	b. Units of Measure	c. Operation, Product, Materials, Etc. (specify)	(list outfall nos.)

IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement order, enforcement compliance schedule letter, stipulations, court orders, and grant or loan conditions.

☒ Yes (complete the following table) ☐ No (go to Item VI-B)

1. Identification of Condition, Agreement, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	a. No.	b. Source of Discharge		a. Required	B. Projected
(See Attachment 5)					

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

☐ Mark "X" if description of additional control programs is attached.

VII INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding--Complete one set of tables for each outfall -- Annotate the outfall number in the space provided. NOTE: Tables VII-A, VII-B, and VII-C are included on separate sheets number VII-1 through VII-9.

D. Use the space below to list any of the pollutants listed in Table 2CS-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. Pollutant	2. Source	1. Pollutant	2. Source
N/A			

POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item VII-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or by-product?

☐ YES (list all such pollutants below)

☒ NO (go to IX)

IX BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☒ YES (identify the test(s) and describe their purposes below)

☐ NO (go to Section X)

Acute WET performed bi-monthly on Outfall D-00F in conjunction with Spectrus CT 1300 (Clam-Trol) application.

(See attachment 6 for summary of results)

Testing performed by Hydrosphere Research, 11842 Research Circle, Alachua, FL 32615

FL-NELAP Cert. # EE82295

X CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

☒ YES (list the name, address, telephone number, and certification number of, and pollutants analyzed by each such laboratory or firm below) ☐ NO (go to Section XI)

A. Name	B. Address	C. Telephone (area code & no.)	D. Pollutants Analyzed (list)
Southern Analytical Laboratories FL-NELAP Cert. # E84129	110 Bayview Blvd., Oldsmar, FL 34677	813-855-1844	All except for internal CR3 outfalls (I-0FE, I-0FG, ECST, CD)
GEL Laboratories, LLC FL-NELAP Cert. # E87156	P.O. Box 30712 Charleston, SC 29417	(843) 556-8171	Internal CR3 outfalls I-0FE, I-0FG, ECST, CD

CONNECTION TO REGIONAL POTW

A. Indicate the relationship between this project and area regional planning for wastewater treatment. List steps to be taken for this industrial wastewater facility to become part of an area-wide wastewater treatment system.

N/A

XII-A CERTIFICATIONS FOR NEW OR MODIFIED FACILITIES

This is to certify the engineering features of this pollution control project have been designed by me and found to be in conformity with sound engineering principles, applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules of the Department. It is also agreed that the undersigned, if authorized by the owner, will furnish the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signature_____
Company Name_____
Address_____
Name (please type)

(Affix Seal)

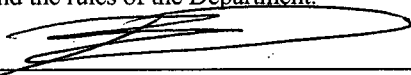
Florida Registration No.:_____
Telephone No.:_____
Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a 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 submitted 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.

Name & Official Title (Please type or print)_____
Signature_____
Telephone No. (area code & No.)_____
Date Signed

XII-B CERTIFICATIONS FOR PERMIT RENEWALS

This is to certify the engineering features of this pollution control project have been examined by me and found to be in conformity with sound engineering principles, applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules of the Department.

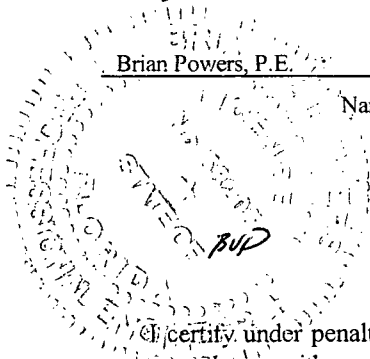


Signature

Brian Powers, P.E.

Name (please type)

(Affix Seal)



I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a 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 submitted 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.

Larry Hatcher, Crystal River Fossil Plant Manager

Name & Official Title (Please type or print)

352-563-4484

Telephone No. (area code & No.)

Progress Energy Florida, Inc.

Company Name

Address Crystal River Energy Complex

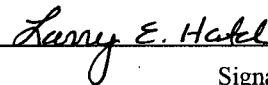
15760 W. Powerline St.

Crystal River, FL 34428

Florida Registration No.: 53205

Telephone No.: 352-464-7714

Date 10/15/09



Signature

10/26/09

Date Signed

INTAKE

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format.
SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						3.. Units		4. Intake (optional)			
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand (CBOD)	< 2						1	mg/L				
b. Chemical Oxygen Demand (COD)	120						1	mg/L				
c. Total Organic Carbon (TOC)	4.4						1	mg/L				
d. Total Suspended Solids (TSS)	52						1	mg/L				
e. Total Nitrogen (as N)	0.38						1	mg/L				
f. Total Phosphorus (as P)	0.01						1	mg/L				
g. Ammonia (as N)	0.19						1	mg/L				
h. Flow - actual or projected	Value		Value		Value					Value		
i. Flow - design	Value		Value		Value					Value		
j. Specific Conductivity	Value 41,980		Value		Value		1	umhos/cm		Value		
k. Temperature (winter)	Value26.3		Value		Value 17.5		12	°C		Value		
l. Temperature (summer)	Value35.0		Value		Value 29.8		12	°C		Value		
m. . pH	Min. 7.52	Max 8.50	Min.	Max.			49	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	57						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	5						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>	1						1	# col/100 ml				
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.78						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				

: Item VII-B Contd.

Facility ID. Number FL0000159Outfall No. Intake

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.38						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	< 1.3						1	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				
j. Radioactivity	<input type="checkbox"/>	<input type="checkbox"/>												
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	2.8						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	230						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	0.8						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	1.1						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	2,400						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.1						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	0.05						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	0.21						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	0.005						1	mg/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	3.7						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	0.18						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	1,100						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	0.039						1	mg/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	1.5						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				

Facility ID. Number: FL0000159 Outfall No. Intake

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.045						1	mg/L				
2M. Arsenic, Total (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
3M. Beryllium, Total (7440-41-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.0001						1	mg/L				
4M. Cadmium, Total (7440-43-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
5M. Chromium, Total (7440-47-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.004						1	mg/L				
6M. Copper, Total (7440-50-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.035						1	mg/L				
7M. Lead, Total (7439-92-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
8M. Mercury, Total (7439-97-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.5						1	ng/L				
9M. Nickel, Total (7440-02-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
10M. Selenium, Total (7782-49-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
11M. Silver, Total (7440-22-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
12M. Thallium, Total (7440-28-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
13M. Zinc, Total (7440-66-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.035						1	mg/L				
14M. Cyanide, Total (57-12-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
15M. Phenols, Total	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
ACROLEIN, ACRYLONITRILE, 2,4-DINITROPHENOL, AND 2-METHYL-4,6-DINITROPHENOL															
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.63						1	ug/L				
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.6						1	ug/L				

Facility ID. Number: FL0000159 Outfall No. Intake

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
GC/MS FRACTION VOLATILE COMPOUNDS (continued)																
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.10						1		ug/L				
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.10						1		ug/L				
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.22						1		ug/L				
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.04						1		ug/L				
8V. Chloro-dibromomethane (124-8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.15						1		ug/L				
9V. Chloroethane (74-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.39						1		ug/L				
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.39						1		ug/L				
11V. Chloroform (67-86-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.14						1		ug/L				
12V. Dichloro-bromomethane (75-24-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.13						1		ug/L				
13V. Dichloro-difluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.74						1		ug/L				
14V. 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1		ug/L				
15V. 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1		ug/L				
16V. 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1		ug/L				
17V. 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.06						1		ug/L				
18V. 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.14						1		ug/L				
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.13						1		ug/L				
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.58						1		ug/L				
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.47						1		ug/L				
22V. Methylene Chloride (74-98-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.13						1		ug/L				
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1		ug/L				
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.16						1		ug/L				

Facility ID. Number: FL0000159 Outfall No. Intake

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GC/MS FRACTION VOLATILE COMPOUNDS (continued)															
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.10						1	ug/L				
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.30						1	ug/L				
27V. 1,1,2-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.09						1	ug/L				
28V. 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.23						1	ug/L				
29V. Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1	ug/L				
30V. Trichloro-fluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.21						1	ug/L				
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.38						1	ug/L				
GC/MS FRACTION SEMI-VOLATILE COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
2A. 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
3A. 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
5A. 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 15						1	ug/L				
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 15						1	ug/L				
8A P-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
9A Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
10A Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
11A 2,4,5-Trichloro-phenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				
GC/MS FRACTION ESSENTIAL COMPOUNDS															
1B. Acenaphthene (63-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 100						1	ug/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
12B. Bis (2-Chloropropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
15B. Butyl Benzyl Phthalate (84-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
22B. 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 40						1	ug/L				
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 5						1	ug/L				
26B. Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 5						1	ug/L				
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				

Facility ID. Number: FL0000159 Outfall No. Intake

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)	
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
33B. Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
35B. Hexachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
40B. Nitrobenzene (98-95-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				
41B. N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
43B. N-Nitro-sodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
44B. Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
45B. Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
GROUP 1 (PRIORITY)															
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3P. -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159 Outfall No. Intake

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

OUTFALL D-011

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format.
SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent							3. Units		4. Intake (optional)		
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Catonous Biochemical Oxygen Demand (CBOD)	<2						1	mg/L				
b. Chemical Oxygen Demand (COD)	120						1	mg/L				
c. Total Organic Carbon (TOC)	3.8						1	mg/L				
d. Total Suspended Solids (TSS)	47						1	mg/L				
e. Total Nitrogen (as N)	0.82						1	mg/L				
f. Total Phosphorus (as P)	0.01						1	mg/L				
g. Ammonia (as N)	0.071						1	mg/L				
h. Flow - actual or projected	Value 446.4		Value 446.4		Value				MGD	Value		
i. Flow - design	Value 446.4		Value 446.4		Value				MGD	Value		
j. Specific Conductivity	Value 42,800		Value		Value		1	umbos/cm		Value		
k. Temperature (winter)	Value 33.4		Value		Value 25.6		12	°C		Value		
l. Temperature (summer)	Value 35.9		Value		Value 34.1		12	°C		Value		
m. pH	Min. 7.9	Max. 8.5	Min.	Max.			37	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	56						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	10						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	# col/100 ml				
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.77						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				

: Item VII-B Contd.

Facility ID. Number FL0000159Outfall No. D-011

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.82						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	< 1.3						1	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				
j. Radioactivity	<input type="checkbox"/>	<input type="checkbox"/>												
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	8.4						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	290						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	3.0						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	0.7						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	2,400						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.1						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	2						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	0.21						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.05						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	0.005						1	mg/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	3.8						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	0.18						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	1,200						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	0.020						1	mg/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	1.5						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.041						1	mg/L				
2M. Arsenic, Total (7723-14-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0048						1	mg/L				
3M. Beryllium, Total (7440-41-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.0001						1	mg/L				
4M. Cadmium, Total (7440-43-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
5M. Chromium, Total (7440-47-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.004						1	mg/L				
6M. Copper, Total (7440-50-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
7M. Lead, Total (7439-92-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
8M. Mercury, Total (7439-97-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.2						1	ng/L				
9M. Nickel, Total (7440-02-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
10M. Selenium, Total (7782-49-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0087						1	mg/L				
11M. Silver, Total (7440-22-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0062						1	mg/L				
12M. Thallium, Total (7440-28-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
13M. Zinc, Total (7440-66-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.021						1	mg/L				
14M. Cyanide, Total (57-12-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
15M. Phenols, Total	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159Outfall No. D-011

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
GC/MS FRACTION-VOLATILE COMPOUNDS (continued)																
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
8V. Chlorodibromomethane (124-8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
9V. Chloroethane (74-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
11V. Chloroform (67-86-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
12V. Dichlorobromomethane (75-24-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
13V. Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
14V. 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
15V. 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
16V. 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
17V. 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
18V. 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
22V. Methylene Chloride (74-98-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GROUP 1: VOLATILE COMPOUNDS (continued)															
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27V. 1,1,2-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28V. 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
29V. Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30V. Trichlorofluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
GROUP 2: NON-VOLATILE COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2A. 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3A. 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5A. 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8A. P-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9A. Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10A. Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11A. 2,4,5-Trichlorophenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
GROUP 3: POLYCYCLIC AROMATIC COMPOUNDS															
1B. Acenaphthene (63-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159

Outfall No. D-011

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12B. Bis (2-Chloropropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15B. Butyl Benzyl Phthalate (84-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22B. 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26B. Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
33B. Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
35B. Hexachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
40B. Nitrobenzene (98-95-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
41B N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
43B. N-Nitro-sodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
44B Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
45B. Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3P -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159Outfall No. D-011

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

OUTFALL D-012

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format. SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						d. No. of Analyses	3.. Units		4. Intake (optional)		
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value			a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand (CBOD)	< 2						1	mg/L				
b. Chemical Oxygen Demand (COD)	120						1	mg/L				
c. Total Organic Carbon (TOC)	4.0						1	mg/L				
d. Total Suspended Solids (TSS)	48						1	mg/L				
e. Total Nitrogen (as N)	0.77						1	mg/L				
f. Total Phosphorus (as P)	0.01						1	mg/L				
g. Ammonia (as N)	0.096						1	mg/L				
h. Flow - actual or projected	Value 472.3		Value 472.3		Value				MGD	Value		
i. Flow - design	Value 472.3		Value 472.3		Value				MGD	Value		
j. Specific Conductivity	Value 42,810		Value		Value		umhos/cm			Value		
k. Temperature (winter)	Value33.4		Value		Value 25.6		12	°C		Value		
l. Temperature (summer)	Value35.9		Value		Value 34.1		12	°C		Value		
m. . pH	Min. 7.9	Max 8.5	Min.	Max.			37	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	54						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	10						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	#col/100 ml				
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.78						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				

: Item VII-B Contd.

Facility ID. Number FL0000159Outfall No. D-012

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.77						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	< 1.3						1	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				
j. Radioactivity														
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	3.7						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	280						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	3.0						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	0.9						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	2,300						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.1						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	2						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	0.23						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	0.05						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	0.005						1	mg/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	3.9						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	0.21						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	1,100						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	0.039						1	mg/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	1.5						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.033						1	mg/L				
2M. Arsenic, Total (7723-14-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
3M. Beryllium, Total (7440-41-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.0001						1	mg/L				
4M. Cadmium, Total (7440-43-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
5M. Chromium, Total (7440-47-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.004						1	mg/L				
6M. Copper, Total (7440-50-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
7M. Lead, Total (7439-92-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
8M. Mercury, Total (7439-97-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.6						1	ng/L				
9M. Nickel, Total (7440-02-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
10M. Selenium, Total (7782-49-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0055						1	mg/L				
11M. Silver, Total (7440-22-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
12M. Thallium, Total (7440-28-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
13M. Zinc, Total (7440-66-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.013						1	mg/L				
14M. Cyanide, Total (57-12-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
15M. Phenols, Total	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8V. Chlorodibromomethane (124-8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9V. Chloroethane (74-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11V. Chloroform (67-86-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12V. Dichlorobromomethane (75-24-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13V. Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14V. 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15V. 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16V. 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17V. 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18V. 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22V. Methylene Chloride (74-98-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
GROUP 1: VOLATILE COMPOUNDS (continued)																
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
27V. 1,1,2-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
28V. 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
29V. Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
30V. Trichlorofluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
GROUP 2: PHENOLS																
1A. 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
2A. 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
3A. 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
5A. 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
8A. P-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
9A. Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
10A. Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
11A. 2,4,5-Trichlorophenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
GROUP 3: POLYCYCLIC AROMATIC COMPOUNDS																
1B. Acenaphthene (63-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12B. Bis (2-Chloropropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15B. Butyl Benzyl Phthalate (84-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22B. 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26B. Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)	
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
33B. Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
35B. Hexachloropyridine (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
40B. Nitrobenzene (98-95-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
41B N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
43B. N-Nitro-sodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
44B Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
45B. Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3P -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

OUTFALL D-013

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format. SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						3.. Units		4. Intake (optional)			
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand (CBOD)	< 2						1	mg/L				
b. Chemical Oxygen Demand (COD)	100						1	mg/L				
c. Total Organic Carbon (TOC)	3.8						1	mg/L				
d. Total Suspended Solids (TSS)	44						1	mg/L				
e. Total Nitrogen (as N)	0.68						1	mg/L				
f. Total Phosphorus (as P)	0.01						1	mg/L				
g. Ammonia (as N)	0.073						1	mg/L				
h. Flow - actual or projected	Value 985		Value 985		Value				MGD	Value		
i. Flow - design	Value 985		Value 985		Value				MGD	Value		
j. Specific Conductivity	Value 42,910		Value		Value		1	uhmos/cm		Value		
k. Temperature (winter)	Value33.4		Value		Value 25.6		12	°C		Value		
l. Temperature (summer)	Value35.9		Value		Value 34.1		12	°C		Value		
m. . pH	Min. 7.9	Max 8.5	Min.	Max.			37	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	56						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	5						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>	1						1	#col/100 ml				
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.77						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				

: Item VII-B Contd.

Facility ID. Number FL0000159 Outfall No. D-013

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.68						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	< 1.3						1	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				
j. Radioactivity														
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	5.0						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	330						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	12.0						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	0.9						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	2,400						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.1						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	0.05						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	0.25						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	0.005						1	mg/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	3.9						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	0.16						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	1,100						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	0.039						1	mg/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	1.6						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
METALS, CYANIDES, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.033						1	mg/L				
2M. Arsenic, Total (7723-14-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0066						1	mg/L				
3M. Beryllium, Total (7440-41-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.0001						1	mg/L				
4M. Cadmium, Total (7440-43-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
5M. Chromium, Total (7440-47-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.004						1	mg/L				
6M. Copper, Total (7440-50-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0054						1	mg/L				
7M. Lead, Total (7439-92-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
8M. Mercury, Total (7439-97-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.2						1	ng/L				
9M. Nickel, Total (7440-02-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
10M. Selenium, Total (7782-49-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0074						1	mg/L				
11M. Silver, Total (7440-22-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
12M. Thallium, Total (7440-28-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
13M. Zinc, Total (7440-66-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.017						1	mg/L				
14M. Cyanide, Total (57-12-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
15M. Phenols, Total	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.005						1	mg/L				
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
ACROLEIN AND ACRYLONITRILE															
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159 Outfall No. D-013

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
GG/MS/TRACTION - VOLATILE COMPOUNDS (continued)																
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
8V. Chlorodibromomethane (124-8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
9V. Chloroethane (74-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
11V. Chloroform (67-86-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
12V. Dichlorobromomethane (75-24-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
13V. Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
14V. 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
15V. 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
16V. 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
17V. 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
18V. 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
22V. Methylene Chloride (74-98-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27V. 1,1,2-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28V. 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
29V. Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30V. Trichlorofluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
GC/MS FRACTION - SEMI-VOLATILE COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2A. 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3A. 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5A. 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8A P-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9A Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10A Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11A 2,4,5-Trichlorophenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
GC/MS FRACTION - SEMI-VOLATILE COMPOUNDS															
1B. Acenaphthene (63-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
12B. Bis (2-Chloroisopropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
15B. Butyl Benzyl Phthalate (84-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
22B. 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
26B. Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
33B. Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
35B. Hexachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
40B. Nitrobenzene (98-95-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
41B N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
43B. N-Nitro-sodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
44B Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
45B. Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3P. -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159 Outfall No. D-013

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)	
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

OUTFALL D-091

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format.
SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						d. No. of Analyses	3.. Units		4. Intake (optional)		
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value			a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand (CBOD)	< 2						1	mg/L				
b. Chemical Oxygen Demand (COD)	120						1	mg/L				
c. Total Organic Carbon (TOC)	4.6						1	mg/L				
d. Total Suspended Solids (TSS)	41						1	mg/L				
e. Total Nitrogen (as N)	0.68						1	mg/L				
f. Total Phosphorus (as P)	0.01						1	mg/L				
g. Ammonia (as N)	0.01						1	mg/L				
h. Flow - actual or projected	Value 3.11		Value 3.11		Value				MGD	Value		
i. Flow - design	Value 3.11		Value 3.11		Value				MGD	Value		
j. Specific Conductivity	Value 42,100		Value		Value		1	umhos/cm		Value		
k. Temperature (winter)	Value		Value		Value			°C		Value		
l. Temperature (summer)	Value30.6		Value		Value		1	°C		Value		
m. . pH	Min. 8.1	Max 8.1	Min.	Max.			1	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	56						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	10						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	#col/100 ml				
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.79						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				

: Item VII-B Contd.

Facility ID. Number FL0000159 Outfall No. D-091

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.68						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	< 1.3						1	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				
j. Radioactivity														
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	5.6						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	53						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	1.1						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	0.4						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	2,400						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.1						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	0.05						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	0.26						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	0.005						1	mg/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	3.8						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	0.22						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	1,100						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	0.041						1	mg/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	1.5						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.018						1	mg/L				
2M. Arsenic, Total (7723-14-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0075						1	mg/L				
3M. Beryllium, Total (7440-41-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.0001						1	mg/L				
4M. Cadmium, Total (7440-43-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
5M. Chromium, Total (7440-47-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
6M. Copper, Total (7440-50-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
7M. Lead, Total (7439-92-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
8M. Mercury, Total (7439-97-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.5						1	ng/L				
9M. Nickel, Total (7440-02-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
10M. Selenium, Total (7782-49-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
11M. Silver, Total (7440-22-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
12M. Thallium, Total (7440-28-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
13M. Zinc, Total (7440-66-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.012						1	mg/L				
14M. Cyanide, Total (57-12-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
15M. Phenols, Total	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)															
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
ACROLEIN, ACRYLONITRILE, AND DINITROPHENOLS															
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159 Outfall No. D-091

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)																
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
8V. Chloro-dibromomethane (124-8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
9V. Chloroethane (74-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
11V. Chloroform (67-86-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
12V. Dichloro-bromomethane (75-24-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
13V. Dichloro-difluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
14V. 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
15V. 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
16V. 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
17V. 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
18V. 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
22V. Methylene Chloride (74-98-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

Facility ID. Number: FL0000159 Outfall No. D-091

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GROUP 1: VOLATILE COMPOUNDS (continued)															
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27V. 1,1,2-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28V. 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
29V. Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30V. Trichlorofluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
GROUP 2: CHLOROPHENOLS															
1A. 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2A. 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3A. 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5A. 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8A. P-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9A. Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10A. Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11A. 2,4,5-Trichlorophenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
GROUP 3: POLYCYCLIC AROMATIC COMPOUNDS															
1B. Acenaphthene (63-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159 Outfall No. D-091

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12B. Bis (2-Chloropropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15B. Butyl Benzyl Phthalate (84-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22B. 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26B. Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159 Outfall No. D-091

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
33B. Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
35B. Heptachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
40B. Nitrobenzene (98-95-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
41B N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
43B. N-Nitro-sodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
44B Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
45B. Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
3P. -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

Facility ID. Number: FL0000159 Outfall No. D-091

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)	
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

OUTFALL D-092

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format.
SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent							3. Units		4. Intake (optional)		
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand (CBOD)	< 2						1	mg/L				
b. Chemical Oxygen Demand (COD)	120						1	mg/L				
c. Total Organic Carbon (TOC)	4.6						1	mg/L				
d. Total Suspended Solids (TSS)	41						1	mg/L				
e. Total Nitrogen (as N)	0.68						1	mg/L				
f. Total Phosphorus (as P)	0.01						1	mg/L				
g. Ammonia (as N)	0.01						1	mg/L				
h. Flow - actual or projected	Value 3.11		Value 3.11		Value				MGD	Value		
i. Flow - design	Value 3.11		Value 3.11		Value				MGD	Value		
j. Specific Conductivity	Value 42,100		Value		Value		1	umhos/cm		Value		
k. Temperature (winter)	Value		Value		Value			°C		Value		
l. Temperature (summer)	Value 30.6		Value		Value		1	°C		Value		
m. pH	Min. 8.1	Max 8.1	Min.	Max.			1	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	56						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	10						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	#col/100 ml				
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.79						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				

: Item VII-B Contd.

Facility ID. Number FL0000159Outfall No. D-092

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.68						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	< 1.3						1	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				
j. Radioactivity														
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	5.6						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	53						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	1.1						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	0.4						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	2,400						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.1						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	0.05						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	0.26						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	0.005						1	mg/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	3.8						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	0.22						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	1,100						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	0.041						1	mg/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	1.5						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.018						1	mg/L				
2M. Arsenic, Total (7723-14-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0075						1	mg/L				
3M. Beryllium, Total (7440-41-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.0001						1	mg/L				
4M. Cadmium, Total (7440-43-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
5M. Chromium, Total (7440-47-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
6M. Copper, Total (7440-50-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
7M. Lead, Total (7439-92-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
8M. Mercury, Total (7439-97-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.5						1	ng/L				
9M. Nickel, Total (7440-02-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
10M. Selenium, Total (7782-49-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
11M. Silver, Total (7440-22-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
12M. Thallium, Total (7440-28-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
13M. Zinc, Total (7440-66-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.012						1	mg/L				
14M. Cyanide, Total (57-12-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
15M. Phenols, Total	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
OTHER TOXIC SUBSTANCES															
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
OTHER TOXIC SUBSTANCES															
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GC/MS FRACTION: VOLATILE COMPOUNDS (continued)															
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8V. Chlorodibromomethane (124-8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9V. Chloroethane (74-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11V. Chloroform (67-86-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12V. Dichlorobromomethane (75-24-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13V. Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14V. 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15V. 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16V. 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17V. 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18V. 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22V. Methylene Chloride (74-98-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GC/MS FRACTION VOLATILE COMPOUNDS (continued)															
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27V. 1,1,2-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28V. 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
29V. Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30V. Trichlorofluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
GC/MS FRACTION CHLOROPHENOLS															
1A. 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2A. 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3A. 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5A. 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8A P-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9A Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10A Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11A 2,4,5-Trichlorophenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
GC/MS FRACTION POLYCYCLIC AROMATIC HYDROCARBONS															
1B. Acenaphthene (63-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159Outfall No. D-092

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12B. Bis (2-Chloroisopropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15B. Butyl Benzyl Phthalate (84-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22B. 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26B. Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159Outfall No. D-092

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
33B. Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
35B. Hexachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
40B. Nitrobenzene (98-95-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
41B N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
43B. N-Nitro-sodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
44B Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
45B. Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
SECTION 6: PESTICIDES															
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3P -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159Outfall No.: D-092

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

OUTFALL D-093

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format.
SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						3. Units		4. Intake (optional)			
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand (CBOD)	< 2						1	mg/L				
b. Chemical Oxygen Demand (COD)	120						1	mg/L				
c. Total Organic Carbon (TOC)	4.6						1	mg/L				
d. Total Suspended Solids (TSS)	41						1	mg/L				
e. Total Nitrogen (as N)	0.68						1	mg/L				
f. Total Phosphorus (as P)	0.01						1	mg/L				
g. Ammonia (as N)	0.01						1	mg/L				
h. Flow - actual or projected	Value 5.3		Value 5.3		Value				MGD	Value		
i. Flow - design	Value 5.3		Value 5.3		Value				MGD	Value		
j. Specific Conductivity	Value 42,100		Value		Value		1	umhos/cm		Value		
k. Temperature (winter)	Value		Value		Value			°C		Value		
l. Temperature (summer)	Value30.6		Value		Value		1	°C		Value		
m. pH	Min. 8.1	Max 8.1	Min.	Max.			1	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	56						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	10						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	#col/100 ml				
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.79						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				

: Item VII-B Contd.

Facility ID. Number FL0000159Outfall No. D-093

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.68						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	< 1.3						1	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				
j. Radioactivity														
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	5.6						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	53						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	1.1						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	0.4						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	2,400						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.1						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	0.05						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	0.26						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	0.005						1	mg/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	3.8						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	0.22						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	1,100						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	0.041						1	mg/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	1.5						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.018						1	mg/L				
2M. Arsenic, Total (7723-14-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0075						1	mg/L				
3M. Beryllium, Total (7440-41-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.0001						1	mg/L				
4M. Cadmium, Total (7440-43-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
5M. Chromium, Total (7440-47-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
6M. Copper, Total (7440-50-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
7M. Lead, Total (7439-92-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
8M. Mercury, Total (7439-97-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.5						1	ng/L				
9M. Nickel, Total (7440-02-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
10M. Selenium, Total (7782-49-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
11M. Silver, Total (7440-22-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
12M. Thallium, Total (7440-28-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
13M. Zinc, Total (7440-66-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.012						1	mg/L				
14M. Cyanide, Total (57-12-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
15M. Phenols, Total	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159Outfall No. D-093

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GC/MS FRACTION: VOLATILE COMPOUNDS (continued)															
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8V. Chlorodibromomethane (124-8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9V. Chloroethane (74-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11V. Chloroform (67-86-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12V. Dichlorobromomethane (75-24-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13V. Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14V. 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15V. 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16V. 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17V. 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18V. 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22V. Methylene Chloride (74-98-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GC/MS FRACTION VOLATILE COMPOUNDS (continued)															
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27V. 1,1,2-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28V. 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
29V. Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30V. Trichlorofluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
GC/MS FRACTION SEMI-VOLATILE COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2A. 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3A. 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5A. 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8A. P-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9A. Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10A. Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11A. 2,4,5-Trichlorophenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
GC/MS FRACTION SEMI-VOLATILE COMPOUNDS															
1B. Acenaphthene (63-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159Outfall No. D-093

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12B. Bis (2-Chloroisopropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15B Butyl Benzyl Phthalate (84-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22B. 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26B. Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
33B. Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
35B. Hexachloropentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
40B. Nitrobenzene (98-95-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
41B. N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
43B. N-Nitro-sodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
44B. Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
45B. Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3P. -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159 Outfall No. D-093

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

OUTFALL D-00H

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format. SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						3. Units		4. Intake (optional)			
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand (CBOD)	< 2						1	mg/L				
b. Chemical Oxygen Demand (COD)	10						1	mg/L				
c. Total Organic Carbon (TOC)	4.3						1	mg/L				
d. Total Suspended Solids (TSS)	12						1	mg/L				
e. Total Nitrogen (as N)	0.16						1	mg/L				
f. Total Phosphorus (as P)	0.12						1	mg/L				
g. Ammonia (as N)	< 0.01						1	mg/L				
h. Flow - actual or projected	Value N/A		Value		Value					Value		
i. Flow - design	Value N/A		Value		Value					Value		
j. Specific Conductivity	Value 4,116		Value		Value		1	umhos/cm		Value		
k. Temperature (winter)	Value		Value		Value			°C		Value		
l. Temperature (summer)	Value30.1		Value		Value		1	°C		Value		
m. pH	Min. 2.7	Max 2.7	Min.	Max.			1	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.04						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	5						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	#col/100 ml				
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				

: Item VII-B Contd.

Facility ID. Number FL0000159Outfall No. D-00H

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.16						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	< 1.3						1	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	0.12						1	mg/L				
j. Radioactivity	<input type="checkbox"/>	<input type="checkbox"/>												
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	4.5						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	19						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	4.3						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	0.2						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	3,200						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.1						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	< 0.05						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	120						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	0.02						1	mg/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.05						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	0.4						1	mg/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	14						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	120						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	0.017						1	mg/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	19						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	0.71						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
2M. Arsenic, Total (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
3M. Beryllium, Total (7440-41-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.040						1	mg/L				
4M. Cadmium, Total (7440-43-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.015						1	mg/L				
5M. Chromium, Total (7440-47-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.024						1	mg/L				
6M. Copper, Total (7440-50-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.73						1	mg/L				
7M. Lead, Total (7439-92-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
8M. Mercury, Total (7439-97-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.0						1	ng/L				
9M. Nickel, Total (7440-02-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.0						1	mg/L				
10M. Selenium, Total (7782-49-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
11M. Silver, Total (7440-22-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
12M. Thallium, Total (7440-28-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
13M. Zinc, Total (7440-66-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.1						1	mg/L				
14M. Cyanide, Total (57-12-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
15M. Phenols, Total	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
ACROLEIN AND ACRYLONITRILE															
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.63						1	ug/L				
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.6						1	ug/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
COMBUSTION VOLATILE COMPOUNDS (continued)																
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.10						1		ug/L				
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.10						1		ug/L				
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.22						1		ug/L				
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.04						1		ug/L				
8V. Chlorodibromomethane (124-8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.15						1		ug/L				
9V. Chloroethane (74-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.39						1		ug/L				
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.39						1		ug/L				
11V. Chloroform (67-86-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.14						1		ug/L				
12V. Dichlorobromomethane (75-24-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.13						1		ug/L				
13V. Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.74						1		ug/L				
14V. 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1		ug/L				
15V. 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1		ug/L				
16V. 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.14						1		ug/L				
17V. 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.06						1		ug/L				
18V. 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.14						1		ug/L				
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.13						1		ug/L				
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.58						1		ug/L				
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.47						1		ug/L				
22V. Methylene Chloride (74-98-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.13						1		ug/L				
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1		ug/L				
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.16						1		ug/L				

Facility ID. Number: FL0000159

Outfall No. D-00H

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GCMS FRACTION VOLATILE COMPOUNDS (continued)															
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.10						1	ug/L				
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.30						1	ug/L				
27V. 1,1,2-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.09						1	ug/L				
28V. 1,1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.23						1	ug/L				
29V. Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1	ug/L				
30V. Trichlorofluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.21						1	ug/L				
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.38						1	ug/L				
1A. 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
2A. 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
3A. 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
5A. 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 15						1	ug/L				
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 15						1	ug/L				
8A. P-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
9A. Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
10A. Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
11A. 2,4,5-Trichlorophenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				
1B. Acenaphthene (63-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 100						1	ug/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
12B. Bis (2-Chloroisopropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
15B. Butyl Benzyl Phthalate (84-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
22B. 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 40						1	ug/L				
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 5						1	ug/L				
26B. Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 5						1	ug/L				
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				

Facility ID. Number: FL0000159Outfall No. D-00H

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
33B. Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
35B. Hexachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
40B. Nitrobenzene (98-95-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				
41B N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
43B. N-Nitro-sodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
44B Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
45B. Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3P. -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159 Outfall No. D-00H

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

OUTFALL D-00F

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format.
SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						3.. Units		4. Intake (optional)			
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand (CBOD)	< 2						1	mg/L				
b. Chemical Oxygen Demand (COD)	120						1	mg/L				
c. Total Organic Carbon (TOC)	4.3						1	mg/L				
d. Total Suspended Solids (TSS)	42						1	mg/L				
e. Total Nitrogen (as N)	0.46						1	mg/L				
f. Total Phosphorus (as P)	0.01						1	mg/L				
g. Ammonia (as N)	0.056						1	mg/L				
h. Flow - actual or projected	Value 43.5		Value 43.5		Value				MGD	Value		
i. Flow - design	Value 43.5		Value 43.5		Value				MGD	Value		
j. Specific Conductivity	Value 42,810		Value		Value		1	umhos/cm		Value		
k. Temperature (winter)	Value		Value		Value			°C		Value		
l. Temperature (summer)	Value38.5		Value		Value		1	°C		Value		
m. . pH	Min. 7.8	Max. 8.4	Min.	Max.			47	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	58						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	5						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>	1						1	#col/100 ml				
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.78						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.46						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	< 1.3						1	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				
j. Radioactivity														
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	2.9						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	340						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	1.0						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	0.6						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	2,400						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.1						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	0.05						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	0.22						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	0.005						1	mg/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	4.0						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	0.18						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	1,100						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	0.053						1	mg/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	1.6						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.038						1	mg/L				
2M. Arsenic, Total (7723-14-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.017						1	mg/L				
3M. Beryllium, Total (7440-41-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.0001						1	mg/L				
4M. Cadmium, Total (7440-43-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
5M. Chromium, Total (7440-47-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.004						1	mg/L				
6M. Copper, Total (7440-50-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.007						1	mg/L				
7M. Lead, Total (7439-92-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
8M. Mercury, Total (7439-97-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.1						1	ng/L				
9M. Nickel, Total (7440-02-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
10M. Selenium, Total (7782-49-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.056						1	mg/L				
11M. Silver, Total (7440-22-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.017						1	mg/L				
12M. Thallium, Total (7440-28-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
13M. Zinc, Total (7440-66-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.018						1	mg/L				
14M. Cyanide, Total (57-12-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
15M. Phenols, Total	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)															
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
ACROLEIN AND ACRYLONITRILE															
1V. Acrolein (107-02-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.63						1	ug/L				
2V. Acrylonitrile (107-13-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.6						1	ug/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
3V. Benzene (71-43-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.10						1	ug/L				
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5V. Bromoform (75-25-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.10						1	ug/L				
6V. Carbon Tetrachloride (56-23-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.22						1	ug/L				
7V. Chlorobenzene (108-90-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.04						1	ug/L				
8V. Chlorodi-bromomethane (124-8-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.15						1	ug/L				
9V. Chloroethane (74-00-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.39						1	ug/L				
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.39						1	ug/L				
11V. Chloroform (67-86-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.14						1	ug/L				
12V. Dichloro-bromomethane (75-24-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.13						1	ug/L				
13V. Dichloro-difluoromethane (75-71-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.74						1	ug/L				
14V. 1,1-Dichloroethane (75-34-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1	ug/L				
15V. 1,2-Dichloroethane (107-06-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1	ug/L				
16V. 1,1-Dichloroethylene (75-35-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.14						1	ug/L				
17V. 1,2-Dichloropropane (78-87-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.06						1	ug/L				
18V. 1,3-Dichloropropylene (542-75-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.14						1	ug/L				
19V. Ethylbenzene (100-41-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.13						1	ug/L				
20V. Methyl Bromide (74-83-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.58						1	ug/L				
21V. Methyl Chloride (74-87-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.47						1	ug/L				
22V. Methylene Chloride (74-98-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.13						1	ug/L				
23V. 1,1,2,2-Tetra-chloroethane (79-34-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1	ug/L				
24V. Tetrachloroethylene (127-18-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.16						1	ug/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GC/MS FRACTION VOLATILE COMPOUNDS (continued)															
25V. Toluene (108-88-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.10						1	ug/L				
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.30						1	ug/L				
27V. 1,1,2-Trichloroethane (71-55-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.09						1	ug/L				
28V. 1,1,2-Trichloroethane (79-00-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.23						1	ug/L				
29V. Trichloroethylene (79-01-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1	ug/L				
30V. Trichlorofluoromethane (75-69-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.21						1	ug/L				
31V. Vinyl Chloride (75-01-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.38						1	ug/L				
1A. 2-Chlorophenol (95-57-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
2A. 2,4-Dichlorophenol (120-83-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
3A. 2,4-Dimethylphenol (105-67-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
5A. 2,4-Dinitrophenol (51-28-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 15						1	ug/L				
6A. 2-Nitrophenol (88-75-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
7A. 4-Nitrophenol (100-02-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 15						1	ug/L				
8A. P-Chloro-M-Cresol (59-50-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
9A. Pentachlorophenol (87-86-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
10A. Phenol (108-95-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
11A. 2,4,5-Trichlorophenol (88-06-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				
1B. Acenaphthene (63-32-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
2B. Acenaphthylene (208-96-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
3B. Anthracene (120-12-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
4B. Benzidine (92-87-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 100						1	ug/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
6B. Benzo (a) Pyrene (50-32-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
8B. Benzo (ghi) Perylene (191-24-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
9B. Benzo (k) Fluoranthene (207-08-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
12B. Bis (2-Chloroisopropyl) Ether (102-60-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
15B Butyl Benzyl Phthalate (84-68-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
16B. 2-Chloronaphthalene (91-58-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				
18B. Chrysene (218-01-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
20B. 1,2-Dichlorobenzene (95-50-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
21B. 1,3-Dichlorobenzene (541-73-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
22B. 1,4-Dichlorobenzene (106-46-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 40						1	ug/L				
24B. Diethyl Phthalate (84-66-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
25B. Dimethyl Phthalate (131-11-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 5						1	ug/L				
26B. Di-N-Butyl Phthalate (84-74-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 5						1	ug/L				
27B. 2,4-Dinitrotoluene (121-14-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
28B. 2,6-Dinitrotoluene (606-20-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						d. No. of Analyses	4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)			a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses	
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass		
29B. Di-N-Octyl Phthalate (117-84-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L					
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L					
31B. Fluoranthene (206-44-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L					
32B. Fluorene (86-73-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L					
33B. Hexachlorobenzene (118-74-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L					
34B. Hexachlorobutadiene (87-68-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L					
35B. Hexachloropentadiene (77-47-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L					
36B. Hexachloroethane (67-72-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L					
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L					
38B. Isophorone (78-59-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L					
39B. Naphthalene (91-20-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L					
40B. Nitrobenzene (98-95-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L					
41B. N-Nitrosodimethylamine (62-75-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L					
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L					
43B. N-Nitro-sodiphenylamine (86-30-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L					
44B. Phenanthrene (85-01-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L					
45B. Pyrene (129-00-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L					
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L					
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
3P. -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

Facility ID. Number: FL0000159Outfall No. D-00F

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses	
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass		
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

OUTFALL D-00F (CD)

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format. SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						3.. Units		4. Intake (optional)			
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Catonocous Biochemical Oxygen Demand (CBOD)	2.22 l H						1	mg/L				
b. Chemical Oxygen Demand (COD)	112						1	mg/L				
c. Total Organic Carbon (TOC)	28.6						1	mg/L				
d. Total Suspended Solids (TSS)	< 4		< 4		< 4		12.	mg/L				
e. Total Nitrogen (as N)	7.58						1	mg/L				
f. Total Phosphorus (as P)	0.042 l						1	mg/L				
g. Ammonia (as N)	0.181						1	mg/L				
h. Flow - actual or projected	Value 1.248		Value 0.12		Value 0.006		48		mgd	Value		
i. Flow - design	Value N/A		Value		Value					Value		
j. Specific Conductivity	Value 10		Value		Value		1	umhos/cm		Value		
k. Temperature (winter)	Value		Value		Value			°C		Value		
l. Temperature (summer)	Value		Value		Value			°C		Value		
m. pH	Min. N/A	Max N/A	Min.	Max.				STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.66						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input checked="" type="checkbox"/>							1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	< 5						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.033						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.010						1	mg/L				

: Item VII-B Contd.

Facility ID. Number FL0000159Outfall No. CD System

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	7.58						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	5.4		5.4		< 1.77		12	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	0.042 l						1	mg/L				
Radioactivity														
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	< 1.73						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	< 2.44						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	< 0.137						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	< 0.393						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.100						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.03						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.500 H						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	< 0.016 H						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.0005						1	ug/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.059						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.100						1	ug/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.167						1	ug/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses		
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass			
METALS, CYANIDE, AND TOTAL PHENOLS																	
1M. Antimony, Total (7440-36-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.600						1	ug/L						
2M. Arsenic, Total (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.66						1	ug/L						
3M. Beryllium, Total (7440-41-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.100						1	ug/L						
4M. Cadmium, Total (7440-43-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.031						1	ug/L						
5M. Chromium, Total (7440-47-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.00						1	ug/L						
6M. Copper, Total (7440-50-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.330						1	ug/L						
7M. Lead, Total (7439-92-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.500						1	ug/L						
8M. Mercury, Total (7439-97-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.5						1	ng/L						
9M. Nickel, Total (7440-02-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.500						1	ug/L						
10M. Selenium, Total (7782-49-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.00						1	ug/L						
11M. Silver, Total (7440-22-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L						
12M. Thallium, Total (7440-28-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.125						1	ug/L						
13M. Zinc, Total (7440-66-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L						
14M. Cyanide, Total (57-12-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.66						1	ug/L						
15M. Phenols, Total	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.7						1	ug/L						
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)																	
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
ACROLEIN AND ACRYLONITRILE																	
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.25						1	ug/L						
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.00						1	ug/L						

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
CCMS FRACTION - VOLATILE COMPOUNDS (continued)															
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
8V. Chlorodibromomethane (124-8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
9V. Chloroethane (74-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.50						1	ug/L				
11V. Chloroform (67-86-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
12V. Dichlorobromomethane (75-24-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
13V. Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
14V. 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
15V. 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
16V. 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
17V. 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
18V. 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
22V. Methylene Chloride (74-98-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GC/MS FRACTION VOLATILE COMPOUNDS (continued)															
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
27V. 1,1,2-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
28V. 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.325						1	ug/L				
29V. Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
30V. Trichlorofluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.500						1	ug/L				
GC/MS FRACTION ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
2A. 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
3A. 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
5A. 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 5.00						1	ug/L				
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
8A. P-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
9A. Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
10A. Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.00						1	ug/L				
11A. 2,4,5-Trichlorophenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
GC/MS FRACTION POLYCYCLIC AROMATIC COMPOUNDS															
1B. Acenaphthene (63-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.310						1	ug/L				
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.884 B I						1	ug/L				
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.737 B I						1	ug/L				
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.39 B						1	ug/L				
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.936 B I						1	ug/L				
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
12B. Bis (2-Chloroisopropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
15B Butyl Benzyl Phthalate (84-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.47 B						1	ug/L				
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
22B. 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
26B. Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				

Facility ID. Number: FL0000159Outfall No. CD System

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.377 I						1	ug/L				
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
33B. Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
35B. Hexachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.63 B						1	ug/L				
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
40B. Nitrobenzene (98-95-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
41B. N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
43B. N-Nitro-sodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
44B. Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
45B. Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.343 I						1	ug/L				
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
5. Pollutants to be tested by the receiving body															
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3P. -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159Outfall No. CD System

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)	
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

OUTFALL D-00F (ECST)

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format. SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						3.. Units		4. Intake (optional)			
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand (CBOD)	2.18 I H						1	mg/L				
b. Chemical Oxygen Demand (COD)	18.6 I						1	mg/L				
c. Total Organic Carbon (TOC)	0.733 I						1	mg/L				
d. Total Suspended Solids (TSS)	5.2		5.2		< 4		12	mg/L				
e. Total Nitrogen (as N)	0.053 I						1	mg/L				
f. Total Phosphorus (as P)	0.045 I						1	mg/L				
g. Ammonia (as N)	< 0.016						1	mg/L				
h. Flow - actual or projected	Value 0.045		Value 0.0153		Value 0.0026		48		mgd	Value		
i. Flow - design	Value N/A		Value		Value					Value		
j. Specific Conductivity	Value 1.7		Value		Value		1	umhos/cm		Value		
k. Temperature (winter)	Value		Value		Value			°C		Value		
l. Temperature (summer)	Value		Value		Value			°C		Value		
m. . pH	Min. N/A	Max N/A	Min.	Max.				STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.66						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input checked="" type="checkbox"/>							1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	< 5						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.033						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.010						1	mg/L				

: Item VII-B Contd.

Facility ID. Number FL0000159Outfall No. ECST

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.053 l						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	5.54		3.12		1.57		12	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	0.045 l						1	mg/L				
Radioactivity														
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	5.25						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	165						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	< 0.040						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	< 0.199						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.338 l						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.03						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.500 H						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	< 0.016 H						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	0.027						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.0005						1	ug/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	286.0						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.100						1	ug/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.167						1	ug/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.6						1	ug/L				
2M. Arsenic, Total (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.56						1	ug/L				
3M. Beryllium, Total (7440-41-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.1						1	ug/L				
4M. Cadmium, Total (7440-43-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.031						1	ug/L				
5M. Chromium, Total (7440-47-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.00						1	ug/L				
6M. Copper, Total (7440-50-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.33						1	ug/L				
7M. Lead, Total (7439-92-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.500						1	ug/L				
8M. Mercury, Total (7439-97-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.5						1	ng/L				
9M. Nickel, Total (7440-02-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.500						1	ug/L				
10M. Selenium, Total (7782-49-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.00						1	ug/L				
11M. Silver, Total (7440-22-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
12M. Thallium, Total (7440-28-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.125						1	ug/L				
13M. Zinc, Total (7440-66-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.87 I						1	ug/L				
14M. Cyanide, Total (57-12-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.66						1	ug/L				
15M. Phenols, Total	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.7						1	ug/L				
PHENOLS															
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
ACROLEIN, ACRYLONITRILE, AND OTHER COMPOUNDS															
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.25						1	ug/L				
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.00						1	ug/L				

Facility ID. Number: FL0000159

Outfall No. ECST

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
CCMS/FRACTION-VOLATILE COMPOUNDS (continued)															
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
8V. Chlorodi-bromomethane (124-8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
9V. Chloroethane (74-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.50						1	ug/L				
11V. Chloroform (67-86-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
12V. Dichloro-bromomethane (75-24-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
13V. Dichloro-difluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
14V. 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
15V. 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
16V. 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
17V. 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
18V. 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
22V. Methylene Chloride (74-98-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
23V. 1,1,2,2-Tetra-chloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses		
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass			
GGMS FRACTION VOLATILE COMPOUNDS (continued)																	
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L						
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L						
27V. 1,1,2-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L						
28V. 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.325						1	ug/L						
29V. Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L						
30V. Trichloro-fluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L						
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.500						1	ug/L						
GGMS FRACTION SEMI-VOLATILE COMPOUNDS																	
1A. 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
2A. 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
3A. 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L						
5A. 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 5.00						1	ug/L						
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
8A. P-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
9A. Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
10A. Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.00						1	ug/L						
11A. 2,4,5-Trichloro-phenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
GGMS FRACTION POLYAROMATIC COMPOUNDS																	
1B. Acenaphthene (63-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.310						1	ug/L						
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L						
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.303 1						1	ug/L						
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L						

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.903 B I						1	ug/L				
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.705 B I						1	ug/L				
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.31 B						1	ug/L				
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.877 B I						1	ug/L				
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
12B. Bis (2-Chloropropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
15B. Butyl Benzyl Phthalate (84-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.56 B						1	ug/L				
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
22B. 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
26B. Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				

Facility ID. Number: FL0000159 Outfall No. ECST

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.584 I						1	ug/L				
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
33B. Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
35B. Hexachlorodipentene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.49 B						1	ug/L				
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
40B. Nitrobenzene (98-95-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
41B. N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
43B. N-Nitro-sodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
44B. Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
45B. Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.488 I						1	ug/L				
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
CCl₄ and PCBs (PCDDs)															
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3P. -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159Outfall No. ECST

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses		
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass			
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														

OUTFALL I-0FG (SDT)

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format.
SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						3. Units		4. Intake (optional)			
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand (CBOD)	53.3						1	mg/L				
b. Chemical Oxygen Demand (COD)	94.4						1	mg/L				
c. Total Organic Carbon (TOC)	14.8						1	mg/L				
d. Total Suspended Solids (TSS)	57.4		26.6		12.8		49	mg/L				
e. Total Nitrogen (as N)	4.02						1	mg/L				
f. Total Phosphorus (as P)	2.25						1	mg/L				
g. Ammonia (as N)	2.44						1	mg/L				
h. Flow - actual or projected	Value 0.800		Value 0.076		Value 0.0176		49		mgd	Value		
i. Flow - design	Value N/A		Value		Value					Value		
j. Specific Conductivity	Value N/A		Value		Value			umhos/cm		Value		
k. Temperature (winter)	Value		Value		Value			°C		Value		
l. Temperature (summer)	Value		Value		Value			°C		Value		
m. pH	Min. 6.05	Max. 8.99	Min. 6.05	Max. 8.99			49	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	2.87						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>							1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	15						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.127						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.865						1	mg/L				

: Item VII-B Contd.

Facility ID. Number FL0000159Outfall No. I-0FG (SDT-1)

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	4.02						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	18		6.51		1.95		49	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	2.25						1	mg/L				
j. Radioactivity, Total	<input type="checkbox"/>	<input type="checkbox"/>												
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	< 1.94						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	15.6						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	< 0.272						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	0.573						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	108						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.03						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.500 H						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	0.0237 I						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	0.0485						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	0.00686						1	mg/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.000346						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	0.321 I						1	ug/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	0.796						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	67.2						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	0.100						1	mg/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	0.0203						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.600						1	ug/L				
2M. Arsenic, Total (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.67 l						1	ug/L				
3M. Beryllium, Total (7440-41-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.1						1	ug/L				
4M. Cadmium, Total (7440-43-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.031						1	ug/L				
5M. Chromium, Total (7440-47-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.22 l						1	ug/L				
6M. Copper, Total (7440-50-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.32						1	mg/L				
7M. Lead, Total (7439-92-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.46 l						1	ug/L				
8M. Mercury, Total (7439-97-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8.88						1	ng/L				
9M. Nickel, Total (7440-02-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	37.7						1	ug/L				
10M. Selenium, Total (7782-49-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.99 l						1	ug/L				
11M. Silver, Total (7440-22-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
12M. Thallium, Total (7440-28-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.125						1	ug/L				
13M. Zinc, Total (7440-66-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	56.8						1	ug/L				
14M. Cyanide, Total (57-12-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.66						1	ug/L				
15M. Phenols, Total	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.7						1	ug/L				
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)															
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
ACROLEIN, ACRYLONITRILE, AND OTHERS															
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.25						1	ug/L				
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.00						1	ug/L				

Facility ID. Number: FL0000159Outfall No. I-0FG (SDT-1)

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses	
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass		
CCMS FRACTION VOLATILE COMPOUNDS (continued)																
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L					
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L					
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L					
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L					
8V. Chlorodi-bromomethane (124-8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L					
9V. Chloroethane (74-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L					
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.50						1	ug/L					
11V. Chloroform (67-86-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.886 l						1	ug/L					
12V. Dichloro-bromomethane (75-24-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L					
13V. Dichloro-difluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L					
14V. 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L					
15V. 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L					
16V. 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L					
17V. 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L					
18V. 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L					
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L					
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L					
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L					
22V. Methylene Chloride (74-98-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L					
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L					
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L					

Facility ID. Number: FL0000159

Outfall No. I-0FG (SDT-1)

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GROUP 1: AROMATIC VOLATILE COMPOUNDS (continued)															
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
27V. 1,1,2-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
28V. 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.325						1	ug/L				
29V. Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.250						1	ug/L				
30V. Trichlorofluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.500						1	ug/L				
GROUP 2: AROMATIC CHLOROPHENOLS															
1A. 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
2A. 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
3A. 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
5A. 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 5.00						1	ug/L				
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
8A P-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
9A Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
10A Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.00						1	ug/L				
11A 2,4,5-Trichlorophenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
GROUP 3: AROMATIC POLYCYCLIC AROMATIC COMPOUNDS															
1B. Acenaphthene (63-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.310						1	ug/L				
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				

Facility ID. Number: FL0000159

Outfall No. I-0FG (SDT-1)

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						d. No. of Analyses	4. Units		5. Intake (optional)		b. No. of Analyses		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)			a. Conc.	b. Mass	a. Long Term Avg. Value				
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass			
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L						
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.811 B I						1	ug/L						
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.702 B I						1	ug/L						
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.14 B						1	ug/L						
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.705 B I						1	ug/L						
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L						
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
12B. Bis (2-Chloropropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
15B Butyl Benzyl Phthalate (84-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L						
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L						
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.50 B						1	ug/L						
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
22B. 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
26B. Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L						

Facility ID. Number: FL0000159Outfall No. I-0FG (SDT-1)

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.440 1						1	ug/L				
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
33B. Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
35B. Hexachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.22 B						1	ug/L				
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.300						1	ug/L				
40B. Nitrobenzene (98-95-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3.00						1	ug/L				
41B. N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
43B. N-Nitro-sodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
44B. Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.200						1	ug/L				
45B. Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.366 1						1	ug/L				
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2.00						1	ug/L				
PCB MONITORING (SECTION 1610)															
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3P. -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159Outfall No. I-0FG (SDT-1)

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

OUTFALL D-071

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format. SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						3.. Units		4. Intake (optional)			
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Carbonous Biochemical Oxygen Demand (CBOD)	< 2						1	mg/L				
b. Chemical Oxygen Demand (COD)	130						1	mg/L				
c. Total Organic Carbon (TOC)	7.3						1	mg/L				
d. Total Suspended Solids (TSS)	74						1	mg/L				
e. Total Nitrogen (as N)	0.82						1	mg/L				
f. Total Phosphorus (as P)	0.071						1	mg/L				
g. Ammonia (as N)	0.078						1	mg/L				
h. Flow - actual or projected	Value 494.64		Value 494.64		Value				MGD	Value		
i. Flow - design	Value 494.64		Value 494.64		Value				MGD	Value		
j. Specific Conductivity	Value 43,300		Value		Value		1	uhmos/cm		Value		
k. Temperature (winter)	Value		Value		Value			°C		Value		
l. Temperature (summer)	Value31.7		Value		Value		1	°C		Value		
m. pH	Min. 7.9	Max 8.4	Min.	Max.			40	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	53						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	10						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>	1						1	#col/100 ml				
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.78						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				

: Item VII-B Contd.

Facility ID. Number

FL0000159

Outfall No.

D-071

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.82						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	< 1.3						1	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	5.2						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	230						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	1.0						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	0.8						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	2,400						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.1						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	0.23						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	0.05						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	0.005						1	mg/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	4.0						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	0.72						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	1,100						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	0.042						1	mg/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	1.6						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
HEAVY METALS AND TOXIC PHENOLS															
1M. Antimony, Total (7440-36-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.036						1	mg/L				
2M. Arsenic, Total (7723-14-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0071						1	mg/L				
3M. Beryllium, Total (7440-41-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.0001						1	mg/L				
4M. Cadmium, Total (7440-43-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
5M. Chromium, Total (7440-47-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.004						1	mg/L				
6M. Copper, Total (7440-50-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
7M. Lead, Total (7439-92-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
8M. Mercury, Total (7439-97-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.3						1	ng/L				
9M. Nickel, Total (7440-02-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
10M. Selenium, Total (7782-49-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.052						1	mg/L				
11M. Silver, Total (7440-22-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0045						1	mg/L				
12M. Thallium, Total (7440-28-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
13M. Zinc, Total (7440-66-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.016						1	mg/L				
14M. Cyanide, Total (57-12-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
15M. Phenols, Total	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)															
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
1V. Acrolein (107-02-8)															
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2V. Acrylonitrile (107-13-1)															
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159 Outfall No. D-071

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
COMBUSTION VOLATILE COMPOUNDS (continued)																
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
8V. Chlorodibromomethane (124-8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
9V. Chloroethane (74-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
11V. Chloroform (67-86-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
12V. Dichlorobromomethane (75-24-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
13V. Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
14V. 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
15V. 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
16V. 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
17V. 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
18V. 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
22V. Methylene Chloride (74-98-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
GROUP 1: VOLATILE COMPOUNDS (continued)																
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
27V. 1,1,2-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
28V. 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
29V. Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
30V. Trichloro-fluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
GROUP 2: PHENOLS																
1A. 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
2A. 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
3A. 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
5A. 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
8A. P-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
9A. Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
10A. Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
11A. 2,4,5-Trichlorophenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
GROUP 3: POLYCYCLIC AROMATIC HYDROCARBONS																
1B. Acenaphthene (63-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12B. Bis (2-Chloropropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15B. Butyl Benzyl Phthalate (84-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22B. 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26B. Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
33B. Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
35B. Hexachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
40B. Nitrobenzene (98-95-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
41B N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
43B. N-Nitro-sodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
44B Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
45B. Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
3P -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses	
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass		
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														

OUTFALL D-072

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format. SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						3.. Units		4. Intake (optional)			
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand (CBOD)	< 2						1	mg/L				
b. Chemical Oxygen Demand (COD)	120						1	mg/L				
c. Total Organic Carbon (TOC)	6.6						1	mg/L				
d. Total Suspended Solids (TSS)	82						1	mg/L				
e. Total Nitrogen (as N)	0.86						1	mg/L				
f. Total Phosphorus (as P)	0.055						1	mg/L				
g. Ammonia (as N)	0.085						1	mg/L				
h. Flow - actual or projected	Value 494.64		Value 494.64		Value				MGD	Value		
i. Flow - design	Value 494.64		Value 494.64		Value				MGD	Value		
j. Specific Conductivity	Value 43,020		Value		Value		1	uhmos/cm		Value		
k. Temperature (winter)	Value		Value		Value			°C		Value		
l. Temperature (summer)	Value32.1		Value		Value		1	°C		Value		
m. pH	Min. 7.9	Max 8.5	Min.	Max.			37	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	58						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	10						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	#col/100 ml				
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.78						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.86						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	< 1.3						1	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	0.055						1	mg/L				
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	5.6						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	150						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	1.3						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	0.8						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	2,500						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	0.4						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	0.21						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	0.20						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	0.005						1	mg/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	3.9						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	0.42						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	1,100						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	0.031						1	mg/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	1.6						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
HEAVY METALS AND TOXIC PHENOLS															
1M. Antimony, Total (7440-36-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.035						1	mg/L				
2M. Arsenic, Total (7723-14-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0075						1	mg/L				
3M. Beryllium, Total (7440-41-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.0001						1	mg/L				
4M. Cadmium, Total (7440-43-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
5M. Chromium, Total (7440-47-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.004						1	mg/L				
6M. Copper, Total (7440-50-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0084						1	mg/L				
7M. Lead, Total (7439-92-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
8M. Mercury, Total (7439-97-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.5						1	ng/L				
9M. Nickel, Total (7440-02-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
10M. Selenium, Total (7782-49-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
11M. Silver, Total (7440-22-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
12M. Thallium, Total (7440-28-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
13M. Zinc, Total (7440-66-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.028						1	mg/L				
14M. Cyanide, Total (57-12-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
15M. Phenols, Total	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
OTHER TOXIC SUBSTANCES															
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
ACROLEIN AND ACRYLONITRILE															
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
TRANSITION VOLATILE COMPOUNDS (continued)																
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
8V. Chlorodibromomethane (124-8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
9V. Chloroethane (74-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
11V. Chloroform (67-86-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
12V. Dichlorobromomethane (75-24-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
13V. Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
14V. 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
15V. 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
16V. 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
17V. 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
18V. 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
22V. Methylene Chloride (74-98-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
SECTION 1 - VOLATILE COMPOUNDS (continued)															
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27V. 1,1,2-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28V. 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
29V. Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30V. Trichloro-fluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
SECTION 2 - PHENOLS															
1A. 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2A. 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3A. 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5A. 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8A. P-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9A. Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10A. Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11A. 2,4,5-Trichloro-phenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
SECTION 3 - POLYCYCLIC AROMATIC COMPOUNDS															
1B. Acenaphthene (63-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value	b. No. of Analyses		
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass		
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
12B. Bis (2-Chloroisopropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
15B. Butyl Benzyl Phthalate (84-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
22B. 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
26B. Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
33B. Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
35B. Hexachloropentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
40B. Nitrobenzene (98-95-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
41B. N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
43B. N-Nitro-sodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
44B. Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
45B. Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
3P. -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

OUTFALL D-094

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format.
SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						3. Units		4. Intake (optional)			
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand (CBOD)	< 2						1	mg/L				
b. Chemical Oxygen Demand (COD)	120						1	mg/L				
c. Total Organic Carbon (TOC)	4.5						1	mg/L				
d. Total Suspended Solids (TSS)	45						1	mg/L				
e. Total Nitrogen (as N)	0.62						1	mg/L				
f. Total Phosphorus (as P)	0.01						1	mg/L				
g. Ammonia (as N)	0.075						1	mg/L				
h. Flow - actual or projected	Value 3.11		Value 3.11		Value				MGD	Value		
i. Flow - design	Value 3.11		Value 3.11		Value				MGD	Value		
j. Specific Conductivity	Value 43,460		Value		Value		1	uhmos/cm		Value		
k. Temperature (winter)	Value		Value		Value			°C		Value		
l. Temperature (summer)	Value36.6		Value		Value		1	°C		Value		
m. pH	Min. 8.1	Max 8.1	Min.	Max.			1	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	59						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	5						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>	2						1	#col/100 ml				
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.78						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				

: Item VII-B Contd.

Facility ID. Number FL0000159Outfall No. D-094

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.62						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	< 1.3						1	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	4.4						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	270						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	3.4						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	0.9						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	2,500						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.1						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	0.05						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	0.05						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	0.005						1	mg/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	4.0						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	0.88						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	1,100						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	0.045						1	mg/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	1.5						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
TOXIC METALS AND TOTAL PHENOLS																
1M. Antimony, Total (7440-36-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.015						1		mg/L				
2M. Arsenic, Total (7723-14-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0047						1		mg/L				
3M. Beryllium, Total (7440-41-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.0001						1		mg/L				
4M. Cadmium, Total (7440-43-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1		mg/L				
5M. Chromium, Total (7440-47-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.004						1		mg/L				
6M. Copper, Total (7440-50-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0087						1		mg/L				
7M. Lead, Total (7439-92-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1		mg/L				
8M. Mercury, Total (7439-97-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.4						1		ng/L				
9M. Nickel, Total (7440-02-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1		mg/L				
10M. Selenium, Total (7782-49-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1		mg/L				
11M. Silver, Total (7440-22-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0076						1		mg/L				
12M. Thallium, Total (7440-28-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1		mg/L				
13M. Zinc, Total (7440-66-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.017						1		mg/L				
14M. Cyanide, Total (57-12-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1		mg/L				
15M. Phenols, Total	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1		mg/L				
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
SECTION 3.100 - VOLATILE COMPOUNDS (Continued)																
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
8V. Chlorodibromomethane (124-8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
9V. Chloroethane (74-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
11V. Chloroform (67-86-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
12V. Dichlorodibromomethane (75-24-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
13V. Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
14V. 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
15V. 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
16V. 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
17V. 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
18V. 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
22V. Methylene Chloride (74-98-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
GROUP 1: VOLATILE COMPOUNDS (continued)															
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27V. 1,1,2-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28V. 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
29V. Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30V. Trichlorofluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
GROUP 2: PHENOLS															
1A. 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2A. 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3A. 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5A. 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8A. P-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9A. Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10A. Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11A. 2,4,5-Trichlorophenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
GROUP 3: POLYCYCLIC AROMATIC COMPOUNDS															
1B. Acenaphthene (63-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

Facility ID. Number: FL0000159 Outfall No. D-094

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
12B. Bis (2-Chloropropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
15B. Butyl Benzyl Phthalate (84-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
22B. 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
26B. Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
33B. Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
35B. Hexachloropentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
40B. Nitrobenzene (98-95-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
41B N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
43B. N-Nitro-sodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
44B Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
45B. Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3P -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent								4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses		a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses	
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass					(1) Conc.	(2) Mass		
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														

Point of Discharge (POD)

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets instead of completing these pages. Use the same format. SEE INSTRUCTIONS.

VII. INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent						3.. Units		4. Intake (optional)			
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand (CBOD)	< 2						1	mg/L				
b. Chemical Oxygen Demand (COD)	130						1	mg/L				
c. Total Organic Carbon (TOC)	5.4						1	mg/L				
d. Total Suspended Solids (TSS)	50						1	mg/L				
e. Total Nitrogen (as N)	0.66						1	mg/L				
f. Total Phosphorus (as P)	0.01						1	mg/L				
g. Ammonia (as N)	0.049						1	mg/L				
h. Flow - actual or projected	Value		Value		Value					Value		
i. Flow - design	Value		Value		Value					Value		
j. Specific Conductivity	Value 43,160		Value		Value		1	umhos/cm		Value		
k. Temperature (winter)	Value26.3		Value		Value 17.5		12	°C		Value		
l. Temperature (summer)	Value35.0		Value		Value 29.8		12	°C		Value		
m. pH	Min. 7.9	Max 7.9	Min.	Max.			1	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. be- lieved present	b. be- lieved absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc...	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
a. Bromide (24949-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	63						1	mg/L				
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
c. Color	<input type="checkbox"/>	<input type="checkbox"/>	10						1	PCU				
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	# col/100 ml				
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>	0.78						1	mg/L				
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				

: Item VII-B Contd.

Facility ID. Number

FL0000159

Outfall No.

POD

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						4. Units		5. Intake (optional)			
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input type="checkbox"/>	0.66						1	mg/L				
h. Oil and grease	<input type="checkbox"/>	<input type="checkbox"/>	< 1.3						1	mg/L				
i. Phosphorus, Total (as P) (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	0.01						1	mg/L				
(1) Alpha, Total	<input type="checkbox"/>	<input type="checkbox"/>	4.0						1	pCi/L				
(2) Beta, Total	<input type="checkbox"/>	<input type="checkbox"/>	220						1	pCi/L				
(3) Radium, Total	<input type="checkbox"/>	<input type="checkbox"/>	0.9						1	pCi/L				
(4) Radium 226, Total	<input type="checkbox"/>	<input type="checkbox"/>	0.9						1	pCi/L				
k. Sulfate (as SO ₄) (14808-79-8)	<input type="checkbox"/>	<input type="checkbox"/>	2,600						1	mg/L				
l. Sulfide (as S)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.1						1	mg/L				
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	mg/L				
n. Surfactants	<input type="checkbox"/>	<input type="checkbox"/>	0.23						1	mg/L				
o. Aluminum, Total (7429-90-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.05						1	mg/L				
p. Barium, Total (7440-39-3)	<input type="checkbox"/>	<input type="checkbox"/>	0.005						1	mg/L				
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input type="checkbox"/>	3.9						1	mg/L				
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input type="checkbox"/>	0.29						1	mg/L				
t. Magnesium, Total (7439-95-4)	<input type="checkbox"/>	<input type="checkbox"/>	1,100						1	mg/L				
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input type="checkbox"/>	0.030						1	mg/L				
v. Manganese, Total (7439-96-5)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input type="checkbox"/>	1.5						1	mg/L				
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input type="checkbox"/>	< 0.01						1	mg/L				

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for all GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
TOXIC METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.034						1	mg/L				
2M. Arsenic, Total (7723-14-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
3M. Beryllium, Total (7440-41-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.0001						1	mg/L				
4M. Cadmium, Total (7440-43-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
5M. Chromium, Total (7440-47-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.004						1	mg/L				
6M. Copper, Total (7440-50-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
7M. Lead, Total (7439-92-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
8M. Mercury, Total (7439-97-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.4						1	ng/L				
9M. Nickel, Total (7440-02-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
10M. Selenium, Total (7782-49-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
11M. Silver, Total (7440-22-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.001						1	mg/L				
12M. Thallium, Total (7440-28-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.001						1	mg/L				
13M. Zinc, Total (7440-66-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.016						1	mg/L				
14M. Cyanide, Total (57-12-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
15M. Phenols, Total	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.005						1	mg/L				
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.63						1	ug/L				
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1.6						1	ug/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)			
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
CONCENTRATION-VOLATILE COMPOUNDS (continued)															
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.10						1	ug/L				
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.10						1	ug/L				
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.22						1	ug/L				
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.04						1	ug/L				
8V. Chlorodibromomethane (124-8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.15						1	ug/L				
9V. Chloroethane (74-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.39						1	ug/L				
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.39						1	ug/L				
11V. Chloroform (67-86-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.14						1	ug/L				
12V. Dichlorobromomethane (75-24-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.13						1	ug/L				
13V. Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.74						1	ug/L				
14V. 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1	ug/L				
15V. 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1	ug/L				
16V. 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1	ug/L				
17V. 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.06						1	ug/L				
18V. 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.14						1	ug/L				
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.13						1	ug/L				
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.58						1	ug/L				
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.47						1	ug/L				
22V. Methylene Chloride (74-98-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.13						1	ug/L				
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1	ug/L				
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.16						1	ug/L				

1. Pollutant and CAS No. (if available)	2. Mark "X"			3. Effluent							4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
SECTION 1 - VOLATILE COMPOUNDS (continued)															
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.10						1	ug/L				
26V. 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.30						1	ug/L				
27V. 1,1,2-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.09						1	ug/L				
28V. 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.23						1	ug/L				
29V. Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.12						1	ug/L				
30V. Trichloro-fluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.21						1	ug/L				
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 0.38						1	ug/L				
1A. 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
2A. 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
3A. 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
4A. 4,6-Dinitro-O-Cresol (534-53-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
5A. 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 15						1	ug/L				
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 15						1	ug/L				
8A P-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
9A Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
10A Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
11A 2,4,5-Trichloro-phenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				
1B. Acenaphthene (63-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 100						1	ug/L				

Facility ID. Number: FL0000159 Outfall No. POD

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	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)			a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
7B. 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
11B. Bis (2-chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
12B. Bis (2-Chloroisopropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
15B. Butyl Benzyl Phthalate (84-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
22B. 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
23B. 3,3'-Dichlorobenzidine (92-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 40						1	ug/L				
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 5						1	ug/L				
26B. Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 5						1	ug/L				
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				

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	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
29B. Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
33B. Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
35B. Hexachloropentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
40B. Nitrobenzene (98-95-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 2						1	ug/L				
41B N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
42B. N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
43B. N-Nitro-sodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 3						1	ug/L				
44B Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
45B. Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
46B. 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	< 1						1	ug/L				
1P. Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2P. -BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3P -BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4P. -BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5P. -BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

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	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avg. Value (if available)		d. No. of Analyses	a. Conc.	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
				(1) Conc.	(2) Mass	(1) Conc.	(2) Mass	(1) Conc.	(2) Mass				(1) Conc.	(2) Mass	
6P. Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7P. 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8P. 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9P. 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10P. Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12P. -Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13P. Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14P. Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15P. Endrin Aldehyde (7421-92-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16P. Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17P. Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18P. PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19P. PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20P. PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21P. PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
22P. PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23P. PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24P. PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25P. Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

FORM 2F



APPLICATION FOR PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY

Facility I.D. Number: FL0000159

Please type or print in black ink. If additional space is needed for your answer, use plain sheets and attach to the application form.

I. Outfall Location:

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number (list)	B. Latitude			C. Longitude			D. Receiving Water (Name)
D-001	28	57	31.7	82	41	53.3	Discharge Canal then to Crystal Bay
D-002	28	57	31.3	82	41	55.3	Discharge Canal then to Crystal Bay
D-003	28	57	31.3	82	41	57.6	Discharge Canal then to Crystal Bay
D-004	28	57	31.1	82	42	01.0	Discharge Canal then to Crystal Bay
D-005	28	57	31.2	82	42	02.8	Discharge Canal then to Crystal Bay

II. Improvements:

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of stormwater or wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions?

1. Identification of Conditions, Agreements	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	No.	Source of Discharge		a. required	b. projected
NPDES permit condition	all		continue implementation of SW3P/BMP plan	N/A	N/A
VI(1) - Continue			(copy provided on CD)		
implementation of BMP plan					

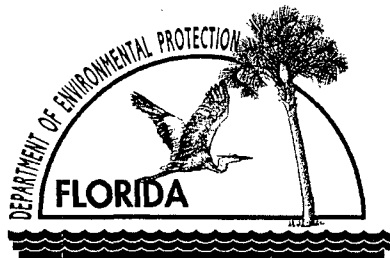
B. You may attach additional sheets describing any additional water pollution or other environmental projects which may affect your discharge that you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map:

Attach a site map showing topography depicting the facility including each of its intake and discharge structures; the drainage area of each stormwater outfall; paved areas and buildings within the drainage area of each stormwater outfall; each known past or present areas used for outdoor storage or disposal of significant materials; each existing structural control measure to reduce pollutants in stormwater runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units; each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive stormwater discharges from the facility. Show hazardous waste storage or disposal areas that do not require a RCRA permit separate from those which do require a permit.

Drainage and outfall maps attached. Other descriptions provided in SW3P/BMP provided on enclosed CD.

FORM 2F



APPLICATION FOR PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY

Facility I.D. Number: FL0000159

Please type or print in black ink. If additional space is needed for your answer, use plain sheets and attach to the application form.

I. Outfall Location:

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number (list)	B. Latitude			C. Longitude			D. Receiving Water (Name)
D-006	28	57	21.8	82	41	56.9	Intake Canal then to Discharge Canal

II. Improvements:

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of stormwater or wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions?

1. Identification of Conditions, Agreements	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	No.	Source of Discharge		a. required	b. projected

B. You may attach additional sheets describing any additional water pollution or other environmental projects which may affect your discharge that you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map:

Attach a site map showing topography depicting the facility including each of its intake and discharge structures; the drainage area of each stormwater outfall; paved areas and buildings within the drainage area of each stormwater outfall; each known past or present areas used for outdoor storage or disposal of significant materials; each existing structural control measure to reduce pollutants in stormwater runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units; each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive stormwater discharges from the facility. Show hazardous waste storage or disposal areas that do not require a RCRA permit separate from those which do require a permit.

IV. Narrative Description of Pollutant Sources:

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces, including paved areas and building roofs, drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall No.	Area of Impervious Surface (units)	Total Area Drained (units)	Outfall No.	Area of Impervious Surface (units)	Total Area Drained (units)
D-001	42,560 sq. ft.	49,658 sq. ft.	D-005	115,434 sq. ft.	115,434 sq. ft.
D-002	166,835 sq. ft.	166,835 sq. ft.	D-006	160,736 sq. ft.	160,736 sq. ft.
D-003	87,120 sq. ft.	87,120 sq. ft.			
D-004	89,734 sq. ft.	89,734 sq. ft.			

B. Provide a narrative description of significant materials that are currently, or in the past three years have been, treated, stored or disposed in a manner that allows exposure to stormwater; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact with stormwater runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

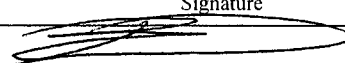
(see SW3P/BMP on enclosed CD)

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in stormwater runoff; and a description of the treatment the stormwater receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall No.	Treatment	Table 2F-1 Code
	No permanent structures, however, temporary measures are employed near catch basins on occasion. These include, but are not limited to, use of portable containment devices placed under oil-filled equipment; drain and/or catch basin covers; oil-absorbent socks/pads placed around catch basins/drains.	4-A

V. Non-stormwater Discharges:

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of non-stormwater discharges, and that all non-stormwater discharges from these outfall(s) are identified in either an accompanying DEP Form 62-620.910(5) or (7) (Forms 2CS or 2ES) application for the outfall.

Name and Official Title (type or print)	Signature	Date Signed
Brian Powers, P.E., Manager-Shift Maintenance, CREC		10/15/09

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

As part of a 1992 NPDES storm water site assessment conducted by CH2M Hill, Inc., and Progress Energy, the storm water outfalls were evaluated and do not contain non-storm water flow. The potential presence of non-storm water flow was determined by a review of plan piping drawings and recent visual evaluation of storm water outfalls during dry weather periods. Review of the drawings further revealed no interconnections with existing industrial or sanitary wastewater discharges.

VI. Significant Leaks or Spills:

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

VII. Discharge Information:

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables VII-A, VII-B, and VII-C are included on separate sheets numbered VII-1 and VII-2.

E. Potential discharges not covered by analysis - is any toxic pollutant listed in Table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or by-product?

☐ Yes (list all such pollutants below) ☒ No (go to section VIII)

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☒ Yes (list results below) ☐ No (go to Section IX)

Toxicity testing performed in conjunction with outfalls covered under NPDES Permit no. FL0000159. Results are provided on Form 2CS submitted separately.

IX. Contract Analysis Information

Were any of the analysis reported in item VII performed by a contract laboratory or consulting firm?

☒ Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below) ☐ No (go to Section X)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
Southern Analytical Laboratories, Inc.	110 Bayview Blvd., Oldsmar, FL 34428	813-855-1844	all except for hydrazine, hydroquinone
			morpholine, and field parameters

X-A. CERTIFICATIONS FOR NEW OR MODIFIED FACILITIES

I certify that the engineering features of this pollution control project have been designed by me and found to be in conformity with sound engineering principles, applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules of the Department. It is also agreed that the undersigned, if authorized by the owner, will furnish the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signature_____
Company Name:_____
Name (please type):_____
Address: _____

(Affix Seal)

Florida Registration No.:_____
Telephone No.:_____
Date:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a 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 submitted 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.

Name & Official Title (type or print)_____
Signature_____
Telephone No. (area code & no.)_____
Date Signed**X-B. CERTIFICATIONS FOR PERMIT RENEWALS**

I certify that the engineering features of this pollution control project have been examined by me and found to be in conformity with sound engineering principles, applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules of the Department.

Signature_____
Progress Energy Florida, Inc._____
Company Name:_____
Brian Powers, P.E._____
Name (please type):_____
Address: Crystal River Energy Complex_____
15760 W. Powerline St._____
Crystal River, FL 34428_____
Florida Registration No.: 53205_____
Telephone No.: 352-464-7714_____
Date: 10/15/09

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a 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 submitted 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.

Larry Hatcher, Manager, Crystal River Fossil Plant & Fuel Operations_____
Name & Official Title (type or print)_____
352-563-4484_____
Telephone No. (area code & no.)_____
Signature_____
Date Signed

VII. Discharge Information (Continued from page 2F-15 of Form 2F)

Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number (if available)	Minimum Values (include units)		Average Values (include units)		# of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil and Grease	< 1.3 mg/L	N/A	N/A	N/A	1	Vehicle Traffic/General Site Runoff
Biochemical Oxygen Demand (BOD ₅)	N/A	< 2 mg/L	N/A	N/A	1	Vehicle Traffic/General Site Runoff
Chemical Oxygen Demand (COD)	N/A	30 (I) mg/L	N/A	N/A	1	Vehicle Traffic/General Site Runoff
Total Suspended Solids (TSS)	N/A	9 mg/L	N/A	N/A	1	Vehicle Traffic/General Site Runoff
Total Kjeldahl Nitrogen	N/A	0.37 mg/L	N/A	N/A	1	Vehicle Traffic/General Site Runoff
Nitrate + Nitrite Nitrogen	N/A	0.28 mg/L	N/A	N/A	1	Vehicle Traffic/General Site Runoff
Total Phosphorus	N/A	0.058 mg/L	N/A	N/A	1	Vehicle Traffic/General Site Runoff
pH	Minimum 7.7	Maximum 7.7	Minimum	Maximum	1	NPDES Permit requirement

Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's wastewater permit for its wastewater effluent if the facility is operating under an existing wastewater permit. Complete one table for each outfall. See instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Minimum Values (include units)		Average Values (include units)		# of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Hydrazine	< 0.005 mg/L	N/A			1	NPDES Permit requirement
Morpholine	< 0.5 mg/L	N/A			1	NPDES Permit requirement
Hydroquinone	0.074 mg/L	N/A			1	NPDES Permit requirement
TRC	< 0.05 mg/L	N/A			1	NPDES Permit requirement
Copper	N/A	0.021 mg/L			1	NPDES Permit requirement
Iron	N/A	0.24 mg/L			1	NPDES Permit requirement
Arsenic	N/A	< 0.001 mg/L			1	NPDES Permit requirement
Cadmium	N/A	< 0.0005 mg/L			1	NPDES Permit requirement
Chromium	N/A	< 0.004 mg/L			1	NPDES Permit requirement
Nickel	N/A	< 0.001 mg/L			1	NPDES Permit requirement
Lead	N/A	0.0022 (I) mg/L			1	NPDES Permit requirement
Selenium	N/A	< 0.001 mg/L			1	NPDES Permit requirement
Vanadium	N/A	< 0.01 mg/L			1	NPDES Permit requirement
Zinc	N/A	0.27 mg/L			1	NPDES Permit requirement
Mercury (low-level)	17 ng/L	N/A			1	Effluent guidelines 40CFR423
PCB-1248	< 0.2 ug/L	N/A			1	Effluent guidelines 40CFR423
PCB-1254	< 0.2 ug/L	N/A			1	Effluent guidelines 40CFR423
PCB-1260	< 0.2 ug/L	N/A			1	NPDES Permit requirement
Temperature	27.4 deg. C	N/A			1	

[illegible]

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (specify units)	6. Total flow from rain event (specify units)	7. Comments
Aug. 18, 2009	180	0.62	98	3,913 gpm	16,175 gal.	

Total daily rainfall and maximum rainfall rates were obtained from a local weather monitoring facility located on-site at Lat: N 28° 57' 31" (28.959°) Lon: W 82° 41' 48" (-82.697°), which is within 1/4 mile of the outfall locations. Flow volumes and flow rates were determined by using exposed surface area, rainfall data, and runoff coefficients. A runoff coefficient of 0.9 was used for impervious surface area and 0.5 was used for pervious area.

VII. Discharge Information (Continued from page 2F-15 of Form 2F)

Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number (if available)	Minimum Values (include units)		Average Values (include units)		# of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil and Grease	3.3 (l) mg/L	N/A			1	Vehicular Traffic; misc. Unit 3 activities
Biochemical Oxygen Demand (BOD ₅)	N/A	19 mg/L			1	Vehicular Traffic; misc. Unit 3 activities
Chemical Oxygen Demand (COD)	N/A	280 mg/L			1	Vehicular Traffic; misc. Unit 3 activities
Total Suspended Solids (TSS)	N/A	192 mg/L			1	Vehicular Traffic; misc. Unit 3 activities
Total Kjeldahl Nitrogen	N/A	1.8 mg/L			1	Vehicular Traffic; misc. Unit 3 activities
Nitrate + Nitrite Nitrogen	N/A	1.2 mg/L			1	Vehicular Traffic; misc. Unit 3 activities
Total Phosphorus	N/A	0.45 mg/L			1	Vehicular Traffic; misc. Unit 3 activities
pH	Minimum 7.8	Maximum 7.8	Minimum	Maximum		NPDES Permit requirement

Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's wastewater permit for its wastewater effluent if the facility is operating under an existing wastewater permit. Complete one table for each outfall. See instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Minimum Values (include units)		Average Values (include units)		# of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Hydrazine	0.013 mg/L	N/A			1	NPDES Permit requirement
Morpholine	1.78 mg/L	N/A			1	NPDES Permit requirement
Hydroquinone	0.485 mg/L	N/A			1	NPDES Permit requirement
TRC	< 0.05 mg/L	N/A			1	NPDES Permit requirement
Copper	N/A	0.039 mg/L			1	NPDES Permit requirement
Iron	N/A	2.5 mg/L			1	NPDES Permit requirement
Arsenic	N/A	0.0085 mg/L			1	NPDES Permit requirement
Cadmium	N/A	0.0012 (l) mg/L			1	NPDES Permit requirement
Chromium	N/A	0.018 mg/L			1	NPDES Permit requirement
Nickel	N/A	0.042 mg/L			1	NPDES Permit requirement
Lead	N/A	0.014 mg/L			1	NPDES Permit requirement
Selenium	N/A	0.0066 mg/L			1	NPDES Permit requirement
Vanadium	N/A	0.042 mg/L			1	NPDES Permit requirement
Zinc	N/A	0.80 mg/L			1	NPDES Permit requirement
Mercury (low-level)	43 ng/L	N/A			1	NPDES Permit requirement
PCB-1248	< 2.0 ug/L	N/A			1	Effluent guidelines 40CFR423
PCB-1254	< 2.0 ug/L	N/A			1	Effluent guidelines 40CFR423
PCB1260	< 2.0 ug/L	N/A			1	Effluent guidelines 40CFR423
Temperature	27.6 deg. C	N/A			1	NPDES Permit requirement

[illegible]

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (specify units)	6. Total flow from rain event (specify units)	7. Comments
08/07/2009	90	1.21	192	1,872 gpm	113,249 gal	

Total daily rainfall and maximum rainfall rates were obtained from a local weather monitoring facility located on-site at Lat: N 28° 57' 31" (28.959°) Lon: W 82° 41' 48" (-82.697°), which is within 1/4 mile of the outfall locations. Flow volumes and flow rates were determined by using exposed surface area, rainfall data, and runoff coefficients. A runoff coefficient of 0.9 was used for impervious surface area and 0.5 was used for pervious area.

VII. Discharge Information (Continued from page 2F-15 of Form 2F)

Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number (if available)	Minimum Values (include units)		Average Values (include units)		# of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil and Grease	< 1.3 mg/L	N/A			1	Vehic. traf; equip. staging
Biochemical Oxygen Demand (BOD ₅)	N/A	< 2 mg/L			1	Vehic. traf; equip. staging
Chemical Oxygen Demand (COD)	N/A	30 (I) mg/L			1	Vehic. traf; equip. staging
Total Suspended Solids (TSS)	N/A	48 mg/L			1	Vehic. traf; equip. staging
Total Kjeldahl Nitrogen	N/A	0.74 mg/L			1	Vehic. traf; equip. staging
Nitrate + Nitrite Nitrogen	N/A	1.6 mg/L			1	Vehic. traf; equip. staging
Total Phosphorus	N/A	0.058 mg/L			1	Vehic. traf; equip. staging
pH	Minimum 8.3	Maximum 8.3	Minimum	Maximum	1	NPDES Permit requirement

Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's wastewater permit for its wastewater effluent if the facility is operating under an existing wastewater permit. Complete one table for each outfall. See instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Minimum Values (include units)		Average Values (include units)		# of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Hydrazine	< 0.005 mg/L	N/A				NPDES Permit requirement
Morpholine	< 0.5 mg/L	N/A				NPDES Permit requirement
Hydroquinone	0.060 mg/L	N/A				NPDES Permit requirement
TRC	< 0.05 mg/L	N/A				NPDES Permit requirement
Copper	N/A	0.0044 mg/L				NPDES Permit requirement
Iron	N/A	0.23 mg/L				NPDES Permit requirement
Arsenic	N/A	0.0016 (I) mg/L				NPDES Permit requirement
Cadmium	N/A	< 0.0005 mg/L				NPDES Permit requirement
Chromium	N/A	0.0043 (I) mg/L				NPDES Permit requirement
Nickel	N/A	0.0029 (I) mg/L				NPDES Permit requirement
Lead	N/A	0.0015 (I) mg/L				NPDES Permit requirement
Selenium	N/A	0.0026 (I) mg/L				NPDES Permit requirement
Vanadium	N/A	0.011 (I) mg/L				NPDES Permit requirement
Zinc	N/A	0.078 mg/L				NPDES Permit requirement
Mercury (low-level)	16 ng/L	N/A				NPDES Permit requirement
PCB-1248	< 0.2 ug/L	N/A				Effluent guidelines 40CFR423
PCB-1254	< 0.2 ug/L	N/A				Effluent guidelines 40CFR423
PCB1260	< 0.2 ug/L	N/A				Effluent guidelines 40CFR423
Temperature	27.7 deg. C	N/A				NPDES Permit requirement

VII. Discharge Information (Continued from Table VII on page VII - 1 of Form 2F)

Part C - List each pollutant shown in Tables 2F-2, 2F-3, and 2F-4 that you know or have reasons to believe is present. Complete one table for each outfall. See instructions for additional details.

[illegible]

Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (specify units)	6. Total flow from rain event (specify units)	7. Comments
Aug. 18, 2009	180	0.62	98	7,551 gpm	31,211 gal.	

Provide a description of the method of flow measurement or estimate.

Total daily rainfall and maximum rainfall rates were obtained from a local weather monitoring facility located on-site at Lat: N 28° 57' 31" (28.959°) Lon: W 82° 41' 48" (-82.697°), which is within 1/4 mile of the outfall locations. Flow volumes and flow rates were determined by using exposed surface area, rainfall data, and runoff coefficients. A runoff coefficient of 0.9 was used for impervious surface area and 0.5 was used for pervious area.

VII. Discharge Information (Continued from page 2F-15 of Form 2F)

Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number (if available)	Minimum Values (include units)		Average Values (include units)		# of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil and Grease	< 1.3 mg/L	N/A			1	Units 1&2 parking area runoff
Biochemical Oxygen Demand (BOD ₅)	< 2 mg/L	< 2 mg/L			1	Units 1&2 parking area runoff
Chemical Oxygen Demand (COD)	< 10 mg/L	< 10 mg/L			1	Units 1&2 parking area runoff
Total Suspended Solids (TSS)	1 mg/L	2 mg/L			1	Units 1&2 parking area runoff
Total Kjeldahl Nitrogen	0.11 (I) mg/L	0.87 mg/L			1	Units 1&2 parking area runoff
Nitrate + Nitrite Nitrogen	0.32 mg/L	0.32 mg/L			1	Units 1&2 parking area runoff
Total Phosphorus	0.036 (I) mg/L	0.036 (I) mg/L			1	Units 1&2 parking area runoff
pH	Minimum 7.0	Maximum 7.0	Minimum	Maximum	1	NPDES Permit requirement

Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's wastewater permit for its wastewater effluent if the facility is operating under an existing wastewater permit. Complete one table for each outfall. See instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Minimum Values (include units)		Average Values (include units)		# of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Hydrazine	0.0036 mg/L	N/A				NPDES Permit requirement
Morpholine	< 0.5 mg/L	N/A				NPDES Permit requirement
Hydroquinone	29 mg/L	N/A				NPDES Permit requirement
TRC	0.1 mg/L	N/A				NPDES Permit requirement
Copper	0.0065 mg/L	0.0056 mg/L				NPDES Permit requirement
Iron	0.097 mg/L	0.048 (I) mg/L				NPDES Permit requirement
Arsenic	< 0.001 mg/L	< 0.001 mg/L				NPDES Permit requirement
Cadmium	< 0.0005 mg/L	< 0.0005 mg/L				NPDES Permit requirement
Chromium	< 0.004 mg/L	< 0.004 mg/L				NPDES Permit requirement
Nickel	0.0060 mg/L	0.0056 mg/L				NPDES Permit requirement
Lead	< 0.001 mg/L	< 0.001 mg/L				NPDES Permit requirement
Selenium	< 0.001 mg/L	< 0.001 mg/L				NPDES Permit requirement
Vanadium	0.022 (I) mg/L	0.023 (I) mg/L				NPDES Permit requirement
Zinc	0.24 mg/L	0.22 mg/L				NPDES Permit requirement
Mercury (low-level)	3.8 ng/L	N/A				NPDES Permit requirement
PCB-1248	< 0.2 ug/L	N/A				Effluent guidelines 40CFR423
PCB-1254	< 0.2 ug/L	N/A				Effluent guidelines 40CFR423
PCB1260	< 0.2 ug/L	N/A				Effluent guidelines 40CFR423
Temperature	29 deg. C	N/A				NPDES Permit requirement

[illegible]

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (specify units)	6. Total flow from rain event (specify units)	7. Comments
Oct. 14, 2009	60	0.1	216	1,295 gpm	6,476 gal.	

Total daily rainfall and maximum rainfall rates were obtained from a local weather monitoring facility located on-site at Lat: N 28 ° 57 ' 31 " (28.959 °) Lon: W 82 ° 41 ' 48 " (-82.697 °), which is within 1/4 mile of the outfall locations. Flow volumes and flow rates were determined by using exposed surface area, rainfall data, and runoff coefficients. A runoff coefficient of 0.9 was used for impervious surface area and 0.5 was used for pervious area.

VII. Discharge Information (Continued from page 2F-15 of Form 2F)

Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number (if available)	Minimum Values (include units)		Average Values (include units)		# of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil and Grease	5.0 mg/L	N/A			1	Vehic. traf; equip. staging
Biochemical Oxygen Demand (BOD ₅)	3.7 mg/L	19 mg/L			1	Vehic. traf; equip. staging
Chemical Oxygen Demand (COD)	540 mg/L	520 mg/L			1	Vehic. traf; equip. staging
Total Suspended Solids (TSS)	552 mg/L	288 mg/L			1	Vehic. traf; equip. staging; coal fines
Total Kjeldahl Nitrogen	5.3 mg/L	7.1 mg/L			1	Vehic. traf; equip. staging
Nitrate + Nitrite Nitrogen	0.47 mg/L	0.38 mg/L			1	Vehic. traf; equip. staging
Total Phosphorus	2.7 mg/L	2.4 mg/L			1	Vehic. traf; equip. staging
pH	Minimum 8.0	Maximum 8.0	Minimum	Maximum	1	NPDES Permit requirement

Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's wastewater permit for its wastewater effluent if the facility is operating under an existing wastewater permit. Complete one table for each outfall. See instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Minimum Values (include units)		Average Values (include units)		# of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Hydrazine	0.0016 mg/L	N/A				NPDES Permit requirement
Morpholine	< 0.5 mg/L	N/A				NPDES Permit requirement
Hydroquinone	27 mg/L	N/A				NPDES Permit requirement
TRC	1.5 mg/L *	N/A				NPDES Permit requirement
Copper	0.079 mg/L	0.071 mg/L				NPDES Permit requirement
Iron	15.0 mg/L	16.0 mg/L				NPDES Permit requirement
Arsenic	0.044 mg/L	0.0032 (l) mg/L				NPDES Permit requirement
Cadmium	0.0013 (l) mg/L	0.0011 (l) mg/L				NPDES Permit requirement
Chromium	0.062 mg/L	0.067 mg/L				NPDES Permit requirement
Nickel	0.053 mg/L	0.059 mg/L				NPDES Permit requirement
Lead	0.030 mg/L	0.029 mg/L				NPDES Permit requirement
Selenium	0.0084 mg/L	0.0089 mg/L				NPDES Permit requirement
Vanadium	0.13 mg/L	0.13 mg/L				NPDES Permit requirement
Zinc	1.1 mg/L	1.0 mg/L				NPDES Permit requirement
Mercury (low-level)	100 ng/L	N/A				NPDES Permit requirement
PCB-1248	< 0.2 ug/L	N/A				Effluent guidelines 40CFR423
PCB-1254	< 0.2 ug/L	N/A				Effluent guidelines 40CFR423
PCB1260	< 0.2 ug/L	N/A				Effluent guidelines 40CFR423
Temperature	29 deg. C	N/A				NPDES Permit requirement

VII. Discharge Information (Continued from Table VII on page VII - 1 of Form 2F)

Part C - List each pollutant shown in Tables 2F-2, 2F-3, and 2F-4 that you know or have reasons to believe is present. Complete one table for each outfall. See instructions for additional details.

[illegible]

Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (specify units)	6. Total flow from rain event (specify units)	7. Comments
Oct. 14, 2009	60	0.1	216	1,803 gpm	9,017 gal.	Recent CR3 outage conditions have temporarily created additional disturbed areas within the surface area that drains via this outfall.

Provide a description of the method of flow measurement or estimate.

Total daily rainfall and maximum rainfall rates were obtained from a local weather monitoring facility located on-site at Lat: N 28 ° 57 ' 31 " (28.959 °) Lon: W 82 ° 41 ' 48 " (-82.697 °), which is within 1/4 mile of the outfall locations. Flow volumes and flow rates were determined by using exposed surface area, rainfall data, and runoff coefficients. A runoff coefficient of 0.9 was used for impervious surface area and 0.5 was used for pervious area.

Form 2F Narrative

Storm Water Sampling

- We followed Form 2F instructions for sampling existing storm water outfalls D-100 through D-600. In addition to conventional pollutants on Section VII, Part A, we sampled for iron, copper, TRC (effluent limits contained in Steam Electric Guidelines - 40 CFR part 423) and those parameters for which limits are contained in the existing NPDES permit (mostly metals). Finally, the Steam Electric Guidelines also contain a statement that there shall be no discharge of PCBs. Even though the site has retro-filled and replaced PCB-containing fluids, the site historically contained equipment containing PCBs. Therefore, all storm water outfall discharges were analyzed for PCB-1254, PCB-1248 and PCB-1260 in the first-flush samples. These are the three PCB compounds that have historically been associated with dielectric fluids.
- Sampling the storm water outfalls at the Crystal River site presented challenges. Once it started raining in late June, there were very few opportunities to collect samples during an acceptable rainfall event. As you know, acceptable rain events must be at least 0.1 inches and have at least 72 hours of "dry" weather between 0.1 inch rainfall events. Most rainfall events over the summer occurred at such a frequency (i.e. every day or every other day), which didn't allow "acceptable event" sample collection. Additionally, several storm water outfalls at the plant are covered at high tide. So if an acceptable rainfall event coincided with high tide, this also precluded sample collection. Nevertheless, included in the application are partially completed forms for storm water outfalls D-100, D-200 and D-400. Due to incomplete sample bottles provided by the contract laboratory, these outfalls were sampled for certain "first-flush" parameters only. Additionally sampling of these outfalls, along with complete sampling of outfall D-300, will be completed and information submitted in the form of an addendum to this application. Complete sampling was recently performed on storm water outfalls D-500 and D-600 on October 14, 2009 and these forms are provided.
- Please note that matrix interference was encountered when analyzing for hydrazine, morpholine and hydroquinone for the D-200 outfall sampled on August 7, 2009. Analyses for these parameters for subsequent outfall sampling involved filtering the sample through a 45 micron filter prior to analysis. Matrix interference was also encountered in the total residual chlorine analysis for outfall D-600.
- Due to the Steam Generator Replacement (SGR) project at CR3, there has been considerable activity in the vicinity of Outfall D-600 before and during the sampling event, which may have contributed to the higher than normal TSS readings noted during the sampling event. The SGR project activity will be completed by the end of 2009.

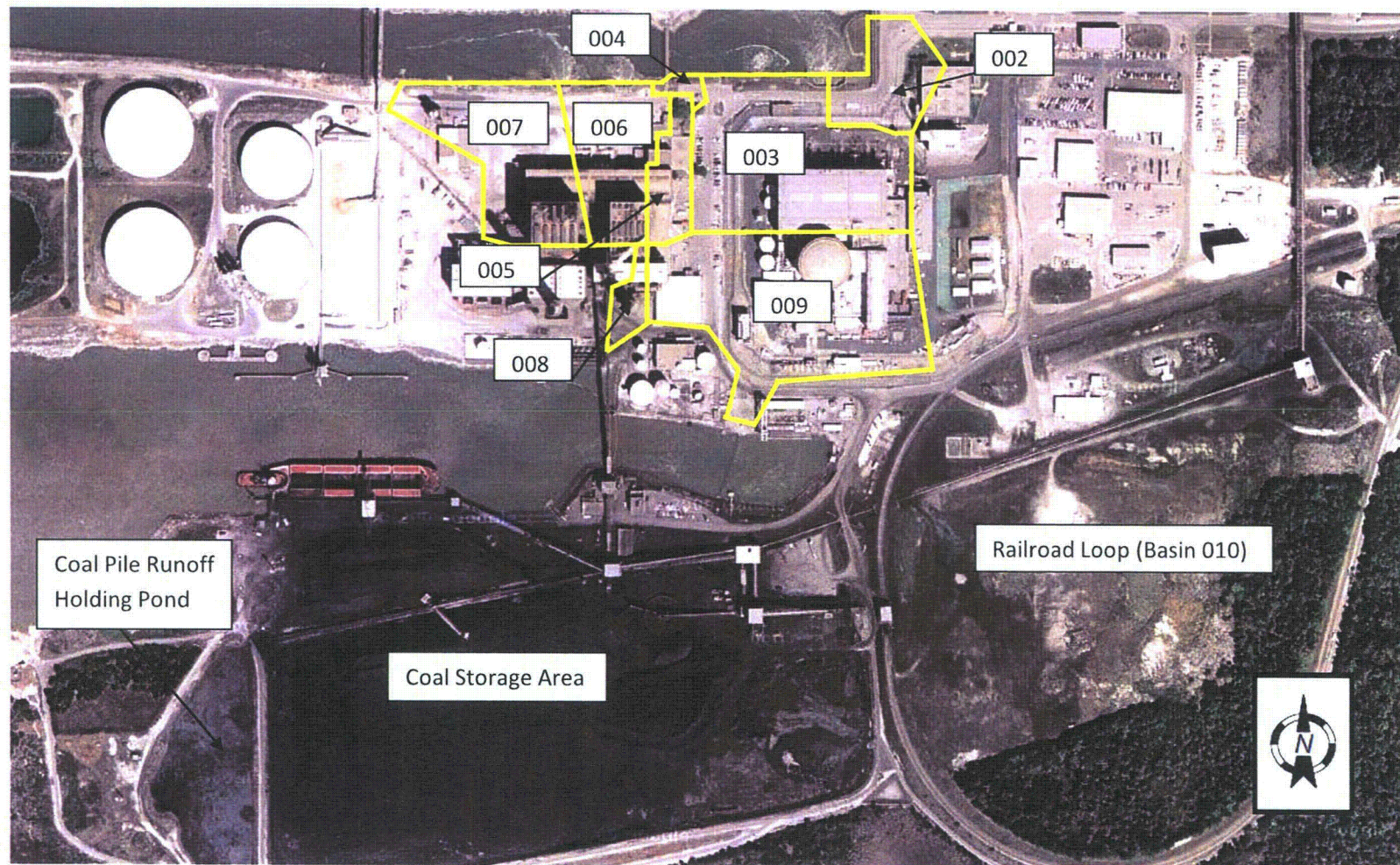
- Please refer to the SW3P/BMP plan included on the enclosed compact disk for additional details related to storm water discharges associated with industrial activity at CR 1, 2, & 3. Additional information relative to the storm water outfalls may be found in attachment 4 to form 2CS.

Form 2F Attachments

- Storm Water Outfalls
- Storm Water Basins
- Outfall/Basin Inventory-Descriptions

NPDES Storm Water Outfalls – Permit No. FL0000159





Crystal River Units 1, 2, and 3
Storm Water Basins
Permit No. FL0000159

Table 5.1 Outfall/Basin Inventory for Units 1, 2, and 3

Permit ID Number ¹	Outfall / Basin Number ²	Basin Description	Receiving Water	Type of Discharge	Description of Outfall	Potential Pollutant Sources
D-100	CRS1 (002)	CR #3 building CR #3 parking area	Discharge Canal	Stormwater	42" CMP	Vehicle Traffic
D-200	CRS2 (003)	CR #3 building	Discharge Canal	Stormwater	42" CMP	Vehicular Traffic Miscellaneous Activities
NA	004 N/A	CR #1 and 2 parking area	Discharge Canal	Stormwater	Drainage Ditch REMOVED	Vehicle Traffic Parking Area
D-300	CRS3 (005)	CR #1 and 2 parking area	Discharge Canal	Stormwater	24" RCP	Used oil staging & other wastes Maintenance equipment storage Mobile equip. storage Metal storage Vehicle traffic
D-400	CRS4 (006)	CR #1 roof drains CR #1 parking area	Discharge Canal	Stormwater	24" RCP	Vehicle traffic Equip. staging Fly ash vehicle traffic
D-500	CRS5 (007)	CR #2 roof drains	Discharge Canal	Stormwater	24" RCP	Vehicle traffic Fly Ash vehicle traffic Bottom ash run off
NA	008 N/A	Water treatment building	Percolation Pond	Stormwater	#4 Sump	Chemical Storage Waste water storage Vehicle Traffic
D-600	CRS6 (009)	So side of CR#3 Ea side of CR#1	Intake Canal	Stormwater	42" CMP	Vehicle traffic Material storage Intake area Cable Vault water
NA	Discharge Canal	Storm Water System	Storm drains to discharge canal	Storm water, ground water with periodic qualitative or quantitative analyses	Storm drain	
NA	Discharge Canal	Plant Access Road Ditch, North Side of CR3	Discharge Canal	Storm water, ground water, Mari culture Center (Dept. of Agriculture)	Drainage Ditch on North Side of CR3	Vehicle Traffic, Storm Water, Ground Water

Notes:

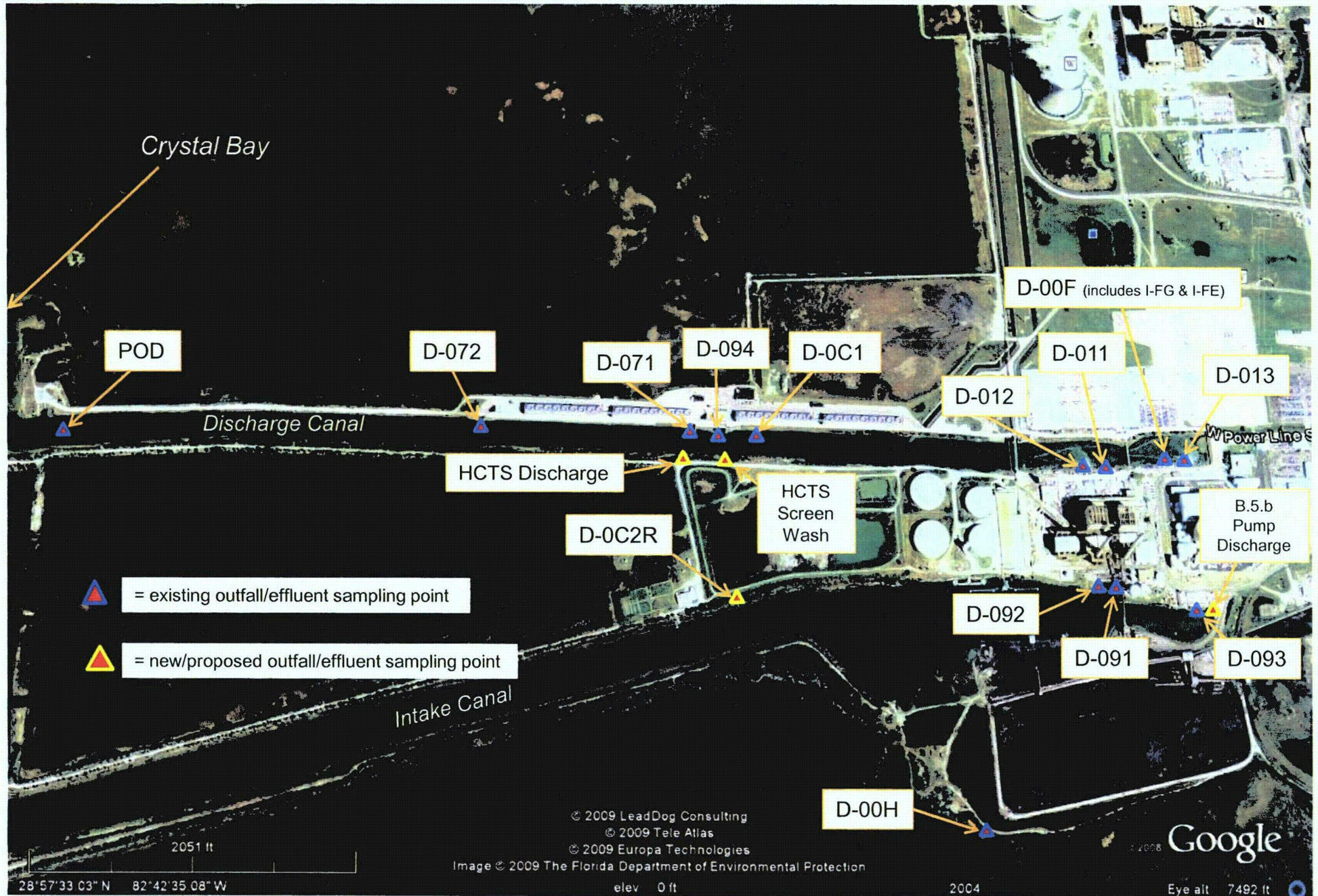
N/A - SWP3 no longer applicable to outfall.

1 - Outfall designation in NPDES Permit No. FL0000159-009

2 - Outfall designations from previous BMP plans and/or as identified in NPDES Multi-Sector General Permit submittal to the FDEP.

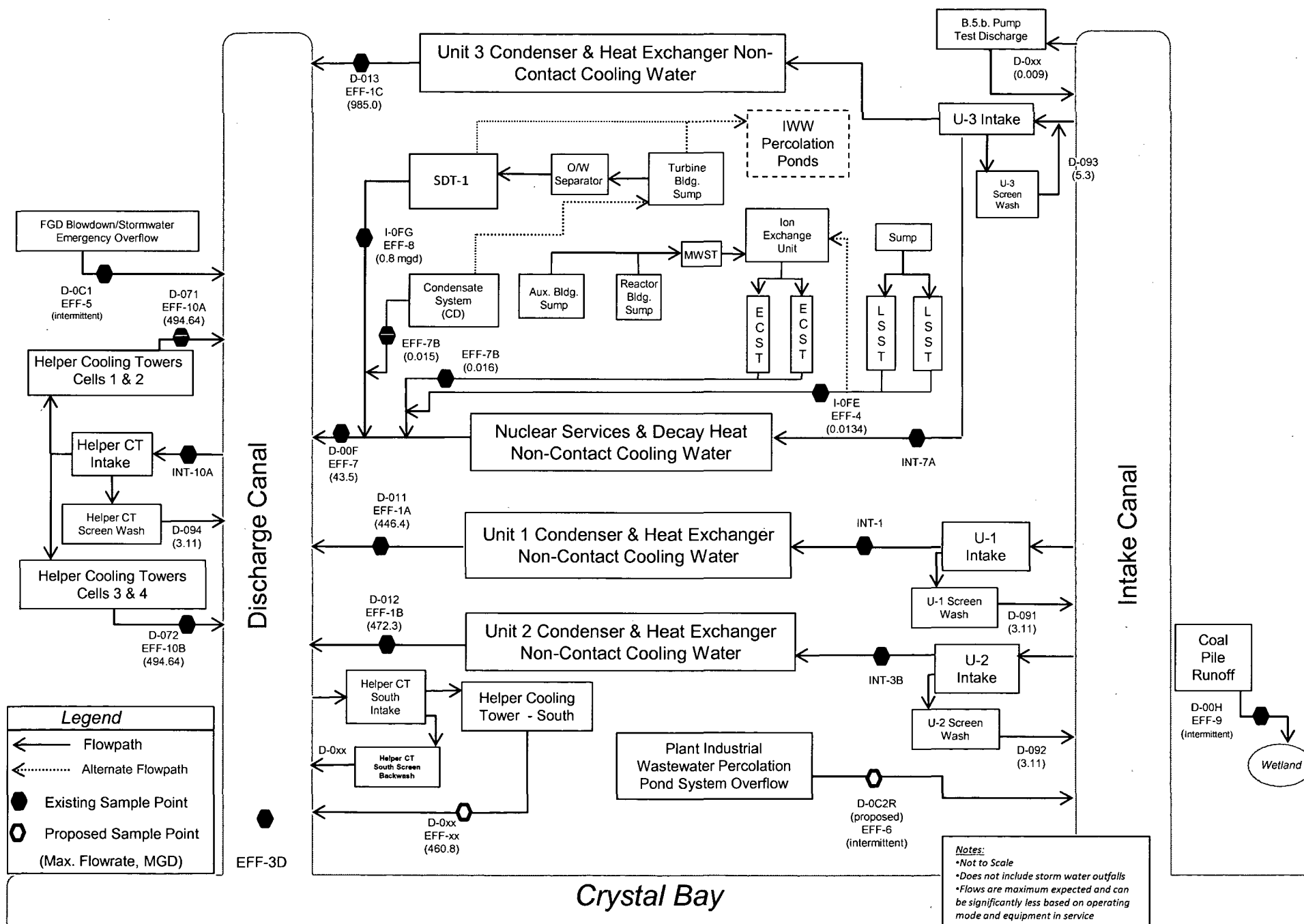
ATTACHMENT 2 – OUTFALL LOCATIONS

Crystal River Units 1, 2, & 3 NPDES Discharge Outfalls – FL0000159



ATTACHMENT 3 – FLOW DIAGRAM

Crystal River Units 1, 2, & 3 NPDES Flow Diagram – FL0000159



Attachment 4

Wastewater Treatment Descriptions

ATTACHMENT 4 WASTE WATER DESCRIPTION

The following contains descriptions of the contributory wastewater streams and wastewater treatment employed at Crystal River Units 1, 2, & 3. Descriptions of chemical usage and chemicals that have the potential to be discharged via the permitted outfalls are provided in attachment 8.

D-011, D-012 and D-013

- **Once through cooling water**

The Crystal River Power Plant Unit 1 (D-011), Unit 2 (D-012), and Unit 3 (D-013) utilize once through non-contact cooling water (OTCW) withdrawn from Crystal Bay via the Units 1, 2, 3, intake canal. The water is circulated through the facilities and discharged back in to the Bay via the discharge canal. Unit 3 utilizes a mechanical cleaning system, known as the Beaudrey ZBL system. In the Beaudrey ZBL system, rubber sponge balls are injected into circulating water (CW) flow at the inlet of a heat exchanger. The sponge balls are circulated through the heat exchanger tubes, where they mechanically remove fouling debris and scale that builds up on the tube surfaces. Sponge balls are then collected at the condenser outlet by a ball strainer and re-injected at the inlet to continuously maintain the cleaning process. In addition, Unit 3 has the ability to inject an oxidizing biocide to treat the main unit condensers. Units 1 and 2 condensers are taken out of service for manual cleaning. No on-line mechanical or chemical treatment is performed on the Units 1 and 2 condensers, but may be utilized in the future (see attachment 6).

- Method of flow measurement

- D-011, D-012 flows are calculated based on pump curves/flow testing and time of operation.
 - D-013 flows are determined by flow testing and run times determined by computer logs.

D-00F

- **Nuclear Services and Decay Heat Seawater System**

This outfall is associated with Unit 3 and consists of once through cooling water as well as discharges from internal processes as described in I-FE and I-FG. Progress Energy is also authorized to treat the process that supplies this discharge with a biocide. This biocide is known as Clamtrol (Spectrus CT1300) which is injected into the system approximately every 21 days. The current permit requires acute Whole Effluent Toxicity (WET) testing every other month.

- Method of flow measurement

- D-00F flow is determined by pump design rating and pump logs that are maintained by the computer logs.

I-0FE

- **Laundry Shower and Sump Tanks (LSST)**

The LSSTs utilize cartridge and bag filters to control suspended solids. Additionally, this outfall can be directed to the ECST (rad-waste treatment system) for further treatment depending on radiological sample results. The treated wastewater is discharged by batch releases via an internal outfall (I-0FE) to outfall D-00F. The wastestreams treated in this system consist of the following:

Laundry Shower and Sump Tanks (LSSTs)

This wastewater includes miscellaneous low volume waste streams (per 40 CFR 423) including, but are not limited to:

- laundry wash water
 - mop water
 - floor drain wastewater
 - laboratory wastewater from the primary laboratory, reagent laboratory, and the annex laboratory.
 - leakage from auxiliary plant systems
 - wastewater from hydrolasing activities.
- Method of flow measurement
 - I-FE flows are determined by flow instrumentation or tank level change.

I-0FG

- **Station Drain Tank-1 (SDT-1)**

The SDT-1 system (non-radwaste treatment system) employs oil/water separation to control O&G as well as mixing to aid in buffering pH. Plans are to also install modifications to allow injection of acid and/or caustic to further control pH and to install a filtration system to further control TSS. The treated wastewater is discharged by batch releases via an internal outfall through outfall D-00F. CR3 also has the ability to route this discharge to the on-site industrial wastewater percolation pond under IWW permit FLA016960 either directly from the turbine building sump or from SDT-1.

The wastestreams treated in SDT-1 consist of the following:

Secondary Drain Tank (SDT-1) System

This wastewater includes miscellaneous low volume waste streams (per 40 CFR 423) including, but are not limited to:

- turbine building floor drains
- turbine building sump
- turbine building equipment drains
- secondary-side draining activities
- CD system steam generator lay-up solution (primary flow path)
- steam plant leak offs
- laboratory wastes from system evaluation
- intermediate cooling system and water supply laboratory waste
- water leakage from auxiliary plant systems
- waste water from hydrolasing activities

Station Drain Tank-1 (SDT-1) (cont.)

- miscellaneous secondary-side system drainage
- generic non-chemical metal cleaning activities
- Method of flow measurement
 - I-0FG flows are determined by flow instrumentation or tank level change.

Evaporator Condensate Storage Tanks/Building Sumps (ECST)

The ECST system (rad-waste treatment system) utilizes an ion exchange system as pollution control. Spent resin from the ion exchange system is not regenerated on-site. Spent resins are sluiced to a spent resin storage tank along with other spent resins (i.e. those used to polish water used for the spent fuel pool), whereby they are then disposed off-site. The treated wastewater is then discharged by batch releases via an internal outfall through outfall D-00F. The wastestreams treated by the ECST include:

ECST System

This wastewater includes miscellaneous low volume waste streams (per 40 CFR 423) including, but are not limited to:

- auxiliary building sump
- auxiliary building floor drains
- auxiliary building equipment drains
- reactor building sump
- miscellaneous primary-side system drainage
- steam generator cleaning process wastewater
- laundry shower and sump tank discharge (alternate flowpath)
- Method of flow measurement
 - ECST flows are determined by flow instrumentation or tank level change.

Condensate System (CD)

These waste streams currently discharge via batch releases via an internal outfall through outfall D-00F. They consist of the following:

CD System

This wastewater includes miscellaneous low volume waste streams (per 40 CFR 423) including, but are not limited to:

- Secondary side steam condensate
- Steam generator lay-up solution (alternate flow path)
- Method of flow measurement
 - CD System flows are determined by flow instrumentation.

D-091, D-092, D-093 and D-094

- **Screen Water Wash**

D-091, D-092, D-093 and D-094 are discharges produced when water from the intake canal (for outfalls D-091, D-092 and D-093) and discharge canal (for outfall D-094) are used to wash debris from the rotating debris screens protecting the intake pumps at Unit 1, 2, and 3 and also the Helper Cooling Towers. These outfalls discharge to the intake canal (for outfalls D-091, D-092) into the Unit 3 intake tunnel behind the bar racks (outfall D-093); and discharge canal (for outfall D-094).

D-0C1

- **Emergency Overflow – FGD Blowdown System**

This area, formerly the old North Ash Pond, has been cleaned of ash and currently contains the FGD Blowdown treatment pond system. Treated wastewater discharge from this pond system is directed to the IWW percolation pond system, but does have an emergency overflow into the old north ash pond basin/perimeter ditch system. This basin also receives storm water runoff from the area surrounding the FGD blowdown pond system. This discharge will likely not be used due to the adequacy of the overall capacity of the FGD pond system; however the outfall should be maintained in the event of extremely high storm events, such as may be experienced during tropical storm/hurricane conditions. Discharge from this pond/perimeter ditch system enters the Units 1, 2, 3 discharge canal just upstream of the helper cooling tower intake structure.

- Method of flow measurement

- D-0C1 flows are determined by manual level reading over a known-size weir.

D-071 and D-072

- **Helper Cooling Tower - Once through cooling water**

The Helper Cooling Towers (HCTs) withdraw water directly from the site discharge canal for additional cooling. The once through cooling water is then directed back to the discharge canal through outfalls D-071 and D-072. In addition, the HCTs have the ability to inject an oxidizing biocide to control biofouling although this treatment system is currently not in service.

- Method of flow measurement

- D-071 and D-072 flows are measured using pump times and design flows.

D-00H

- **Coal Pile Runoff**

Runoff from the coal pile is captured in a collection ditch and pond system. This system has a single valved outfall. This outfall can be allowed to discharge to a marshy area south of the coal pile storage area. The valve that serves this outfall is locked in the closed position. This discharge has not been used due to the adequacy of the overall capacity and percolation capability of the pond system; however the outfall should be maintained for future use as needed.

- Method of flow measurement
 - In the event the outfall valve was to be opened allowing a discharge, flow would be measured by the height of water in the known-size discharge pipe and time of discharge.

New Outfalls

D-0C2R

- **Plant Waste Water Pond System**

This new outfall is a relocation of existing permitted outfall D-0C2. Wastewater discharged via this new outfall would be the result of the overflow of the Unit 1, 2, 3 Industrial Wastewater (IWW) evaporation/percolation pond system. This system receives various low volume wastes from Units 1, 2 & 3 including the discharge from Unit 1 & 2 domestic wastewater treatment plant and Treated FGD blowdown. These discharges are monitored in accordance with permits FLA016960 and FLA118753-001-DW3P, respectively. This area is also sometimes used as a dredge spoil dewatering area. This outfall will discharge to the site intake canal. Details of this system were submitted as part of an NPDES permit modification request in September, 2009.

- Method of flow measurement
 - D-0C2R flows will be determined by flow instrumentation involving a calibrated weir and manual level reading. A control room alarm will let operations know if the pond is nearing an overflow condition.

HCTS Discharge

- The new Helper Cooling Tower South (HCTS) will have an intake and discharge to the existing Crystal River Site discharge canal. Heated once-through cooling water will be removed from the discharge canal via intake pumps. After cooling in a single mechanical forced-draft cooling tower, the water will then be discharged back into the discharge canal via a concrete flume structure. Details of this system were submitted as part of an NPDES permit modification request in September, 2009. No chemical or on-line mechanical treatment is associated with the new cooling tower. It is anticipated that discharges from the HCTS will be similar to D-071 and D-072.

- Method of flow measurement
 - HCTS discharge flows are measured by pump curves and timers.

HCTS Screen Wash

- This discharge is produced when the screen wash pumps utilize water from the discharge canal to wash debris from the rotating traveling screens that will be installed to protect the HCTS intake pumps. The screen wash water is collected and conveyed back to the discharge canal. It is anticipated that this discharge will be similar to D-094.
 - Method of flow measurement
 - HCTS screen backwash flows are measured by pump curves and timers.

B.5.b. Backup Pump Test Discharge

Per recent Nuclear Regulatory Commission (NRC) guidance, CR3 facility was required to install a backup, independently-powered portable emergency water supply pump to provide an emergency source of water for various activities such as fire-fighting, containment spray, flooding the Spent Fuel Pool, etc. The directive also mandates that the pump be tested periodically. During testing events, which are required once every 2 months, the pump will be operated for approximately 30 minutes at 300 gpm producing a discharge of approximately 9,000 gallons. Water will be withdrawn from the intake canal near the Unit 3 intake structure and discharged back into the intake canal within the same area. No pollutants will be added or concentrated in the pump discharge. Water will simply pass through the pump and associated piping.

Various Potential Miscellaneous Discharges

- **Treated Groundwater**

At Crystal River, all groundwater is treated to drinking water standards by lime softening or microfiltration/R.O. processes. This water is then chlorinated and used as potable and/or service water. The service water typically enters the surface water, or is discharged to the ground, by incidental leak offs, bar rack cleaning, pump bearing seals, fugitive dust suppression, and various other flushing/draining activities, including, but not limited to, releases during piping repair, replacement or abandonment; flushing of lines for testing/maintenance; pump priming activities; flushing of heat exchangers; and from pressure relief valves. At Crystal River Units 1, 2, and 3 the estimated release from continuous sources is approximately 118 GPM with an additional 23 GPM from non-continuous sources. This treated water enters the intake and/or discharge canal at various locations which includes storm drains, the facilities' intake structures, and at the Helper Cooling Tower intake structure. A small but undetermined amount of service water may be discharged during routine plant operations. Additionally, treated water may be used in an emergency in place of screen wash water and for fire-fighting training activities or from other fire suppression systems. The treated water would be used if the screen wash pumps failed or were unable to keep up with traveling screen fouling as may be caused by excessive influx of sea grass. At times, untreated groundwater is used for the processes listed above and has the potential to be discharged in lieu of treated groundwater.

- **AC Condensate**

At times, uncontaminated condensate from the outside of various HVAC, air handling or other heat exchange systems, has the potential to be discharged via the various storm water outfalls.

- **Coal**

Coal may be discharged to the intake canal in the course of barge unloading operations or incidental spillage from the coal conveyor system. These releases are minimized through the use of Best Management Practices but do occur. Coal is recovered from the canal on a periodic basis.

- **Pesticide/Herbicide Use**

Pesticides/herbicides are used at various locations around the plant site. These products are applied by licensed applicators to reduce insect infestations around buildings and to control vegetation. These products are applied away from locations where aquatic contact is probable. The exception is herbicide application along the intake/discharge canals where licensed applicators apply FIFRA-approved herbicides due to requirements of the Marine Transportation Safety Act (MTSA), which requires that vegetation be controlled at these areas to enhance surveillance activities.

- **Miscellaneous Discharges**

Various containment structures and electrical manholes/vaults are drained of storm water from time to time via one of the permitted outfalls. Before such water is drained, it is inspected for oil sheen and/or excessive turbidity/color and only allowed to be drained if no unusual conditions are noted.

Attachment 5

- Form 2CS – Section III.D
- Form 2CS – Section VI - Improvements
- Miscellaneous Clarification to Form 2CS/Form 2F Application

ATTACHMENT 5

Form 2CS – Section III.D.

1. Power generating facilities are interconnected to the electrical grid, and, therefore have a reliable backup power supply. In addition, CR3 maintains backup emergency diesel generators as part of NRC requirements relative to redundant backup power supply. However, in the unlikely event of complete power loss, several discharge outfalls, such as condenser discharges, etc., would cease since these discharges are dependent on electric-powered water supply pumps. Likewise with failure of pollution control equipment. In the event of loss of essential pollution control equipment, the discharges would be stopped pending return to service

Passive discharges, such as D-0C2R rely on passive pollution control, such as settling within a pond, and are therefore, unaffected by power loss or loss of an active pollution control system.

Form 2CS - Section VI Improvements

1. Permit condition I.E.15 requires the submittal of a plan of study (POS) for continued monitoring of seagrass. A draft seagrass POS was subsequently submitted to the Department on February 6, 2006. The Department provided comments to the plan which were incorporated into a revised POS (see attached). Sample collections occurred during the fall of 2007 and a final report was issued April 24, 2008 with the understanding that the report would be provided to the Department at the time of this permit renewal. Electronic copies of both the seagrass POS and final report are provided on the CD included as part of this submittal.
2. Permit condition I.E.16 requires the submittal of a plan of study (POS) to determine any effects on biological communities from the heated water discharge to Crystal Bay. A draft biological POS was subsequently submitted to the Department on September 17, 2007. A copy of the report and transmittal correspondence is attached and also on the attached CD. To date we have not heard back from the Department relative to their review of the plan.
3. Permit Section VI.1 requires continued implementation of a Best Management Practices Pollution Prevention Plan (BMP3). CR123 continues to maintain the plan and provide updates to the plan as needed. A copy of the most recent version of the BMP3 plan is provided on the attached CD.

Form 2CS – Section VII

1. Regarding Screen Backwash outfalls D-091, D-092 and D-093, please note that only D-092 was sampled as being representative of all three outfalls. Likewise, D-072 was sampled as being representative of both D-71 and D-072 outfalls.
2. Given the lack of historic discharge from D-00H – South Coal Pile Runoff Basin, which is designed to contain a 10-yr, 24-hr. rainfall event and has rarely ever discharged, we collected grab samples from the perimeter ditch/pond system directly in front of the outfall location, and hence, these samples likely represent worst-case conditions should this outfall discharge.
3. Outfalls D-0C1 and D-0C2 were not sampled. These outfalls historically do not discharge and there was no flow or standing water within the ditches/ponds from which to obtain samples.
4. New outfalls associated with the new Helper Cooling Tower South (HCTS) including both the HCTS discharge, HCTS screen backwash and D-0C2R discharges were not sampled since these outfalls had yet to be constructed by the time of permit renewal submittal. Information related to these outfalls was provided in an NPDES permit modification submitted in September 2009.
5. In order to more accurately characterize discharges entering Crystal Bay from the site discharge canal, we performed sampling at the Point of Discharge (POD) located at the end of the canal. The sampling point is delineated in the existing NPDES permit as EFF-3D.

Miscellaneous Clarification to Form 2CS/2F Application

Many of these issues were discussed in a pre-application meeting with the Department:

- Results below the Method Detection Limit (MDL) are reported as "less-than" (<) the MDL. Results between the MDL and the Practical Quantitation Limit (PQL) are reported and provided with an "I" code. Results with the "B" code indicate that the analyte was detected in the method blank.
- Form 2CS states that the Department may waive composite sampling in which the permittee demonstrates that use of an automatic sampler is infeasible and that a minimum of 4 grab samples over a 24-hr. period will be representative of the discharge. We believe that sampling the intake, non-contact condenser cooling water flows, screen backwash, helper cooling tower discharges, and POD using a composite sampler was infeasible. Additionally, 4 grab samples collected over a 24-hr period would be representative of the discharges given that these outfalls would not be expected to vary significantly over a 24-hour time period. In the pre-application meeting, the Department agreed to this approach. This applied to all analyses that require a composite sample except for mercury. Per the Department's instructions, we performed low-level mercury sampling and analysis on a single grab sample. Mercury results on the forms are provided in nanograms per liter (ng/L).
- Similar to above, Form 2CS states that single grab samples would be acceptable for those outfalls taken from holding ponds or impoundments with a retention time of greater than 24 hours. At Crystal River Unit 3, there are a number of internal outfalls that discharge via "batch" releases from tanks. These include the SDT-1, LSSTs, and ECST system releases. Given that these tanks have the ability to have retention times of greater than 24 hours (i.e. only one tank release occurs within a 24-hour period), we believe that single grab samples would accurately characterize the discharges from these tanks, and hence, would be representative of the discharge. Current NPDES permit requirements reflect these batch releases in that single grab samples are required for NPDES compliance sampling purposes.
- Form 2CS, Section VII instructions requires sampling of all non-storm water outfalls for all parameters in Parts A and B. However, for Part C parameters, it appears that all "non-process wastewater outfalls" only require analyses of Part C parameters through total phenols (i.e. excludes requiring to analyze for dioxin, GC/MS-Volatiles, GC/MS Acid Compounds, and GC/MS Base-Neutral Compounds). Per previous discussions with the Department, we believe, and the Department concurs, that non-contact cooling water would be considered a non-process wastewater. Accordingly, we sampled and analyzed for those parameters on Parts A and B and Part C through total phenols for Outfalls D-011, D-012, D-013, D-071, D-072 and screen backwash discharges D-091, D-092, D-093 and D-094. For all other outfalls, including D-00F, I-0FE, I-0FG, ECST, CD, D-00H, and the intake and POD, we analyzed for the complete Part C list in addition to all Part A and B parameters.

- We did not sample for the Part C, GC/MS Volatile compound 4v. – Bis (Chloromethyl) Ether. Our contract lab indicated that there were few, if any, labs that were certified to perform this analysis. Per USEPA Document EPA-600/S4-81-062 relative to performing analysis of haloethers in industrial and municipal wastewaters, this particular haloether was dropped from the study due to its extreme volatility and hydrolytic instability.
- During scheduling of NPDES permit renewal sampling in June, 2009 we learned from CR3 personnel that recent NRC guidance allows samples collected from the CR3 internal outfalls (I-0FE, I-0FG, ECST and CD system discharges) to be analyzed only by laboratories that have a valid Radioactive Material License (RML). We had planned to have these samples analyzed by Southern Analytical Laboratories, Inc. (SAL), which is NELAC-certified in the State of Florida. However, SAL does not have a RML. As such, were required to investigate and find a lab that had both a RML and was NELAC certified in Florida. Consequently, we made arrangements with GEL Laboratories, LLC, in Charleston, SC, to perform these analyses. GEL has both a radioactive material license and is NELAC certified in Florida for the analyses required to be performed, with the sole exception of fecal coliform. Given the holding time for the fecal coliform analysis, and the fact that GEL is not certified to perform this analysis, discussions with the Department have resulted in the waiver from having to perform this analysis on the internal CR3 outfalls. Please note, however, that a fecal coliform analysis was conducted on outfall D-00F (into which the internal outfalls discharge), with the result being 1 colony/100 mls.

We were able to sample for 3 of the 4 internal outfalls, i.e. I-0FG (SDT-1 waste neutralization tank discharge); CD System and the ECST discharges. We were unable to complete sampling of I-0FE (LSST Discharge) prior to unit shutdown as part of the Steam Generator Replacement project and refueling outage. We will sample this outfall and provide results as soon as practicable once CR3 exits the outage, sometime later this year or early in 2010.

Storm Water Sampling

- We followed Form 2F instructions for sampling existing storm water outfalls D-100 through D-600. In addition to conventional pollutants on Section VII, Part A, we sampled for iron, copper, TRC (effluent limits contained in Steam Electric Guidelines - 40 CFR part 423) and those parameters for which limits are contained in the existing NPDES permit (mostly metals). Finally, the Steam Electric Guidelines also contain a statement that there shall be no discharge of PCBs. Even though the site has retro-filled and replaced PCB-containing fluids, the site historically contained equipment containing PCBs. Therefore, all storm water outfall discharges were analyzed for PCB-1254, PCB-1248 and PCB-1260 in the first-flush samples. These are the three PCB compounds that have historically been associated with dielectric fluids.
- Sampling the storm water outfalls at the Crystal River site presented challenges. Once it started raining in late June, there were very few opportunities to collect samples during an acceptable rainfall event. As you know, acceptable rain events must be at least 0.1 inches and have at least 72 hours of "dry" weather between 0.1 inch rainfall events. Most rainfall events over the summer occurred at such a frequency (i.e. every day or every other day), which didn't allow "acceptable event" sample collection. Additionally, several storm water outfalls at the plant are covered at high tide. So if an acceptable rainfall event coincided with high tide, this also precluded sample collection. Nevertheless, included in the application are partially completed forms for storm water outfalls D-100, D-200 and D-400. Due to incomplete sample bottles provided by the contract laboratory, these outfalls were sampled for certain "first-flush" parameters only. Complete sampling was recently performed on storm water outfalls D-500 and D-600 on October 14, 2009. We will submit results from these outfalls within the coming weeks and will submit the additional information storm water data as sampling conditions permit.

ATTACHMENT 6

Requested Permit Clarifications/Changes

Attachment 6

Requested Permit Changes/Clarifications

Progress Energy requests the following changes and clarifications be made to the reissued NPDES permit. Details regarding existing and/or new chemical usage are provided in Attachment 7.

1. D-011 & D-012 – Units 1 & 2 Condenser Cooling Water

The current NPDES permit authorizes the use of SIDTEC, a mechanical on-line condenser maintenance system. Please note that this system has been removed, however, the permittee requests the approval to utilize an alternative on-line mechanical cleaning system, such as the Beaudrey ZBL system that is currently used on the D-013 – Unit 3 condenser cooling water system, or equivalent.

2. D-00F – Nuclear Services and Decay Heat Seawater System Effluent

Currently, CR3 injects Clamtrol (Spectrus CT 1300) every 21 days to control biofouling within this system, which is also known as the raw water (RW) system. Acute WET testing is required every other month during treatment. However, CR3 now has hydrozoan biofouling issues within this system which the current treatment does not control. In benchmarking similar power plants with similar systems, most appear to employ continuous chlorination and/or bromination systems. As such, we request that the permit authorize the use of oxidizing biocides (i.e. chlorine, bromine, or a mixture of the two). It is anticipated that use of oxidizing biocides will serve to address all biofouling issues, including hydrozoans and mollusks. We suggest that the same monitoring requirements for total residual oxidants (TRO) that apply to outfalls D-011, D-012 and D-013 apply to outfall D-00F. This requirement would include a daily maximum TRO limit of 0.01 mg/L to be met at sample point EFF-7, a monitoring frequency of 1/week with sample type being multiple grabs. In order to meet the 0.01 mg/L TRO limit, a dechlorination/debromination chemical (such as sodium bisulfite or sodium metabisulfite) will be added at a stoichiometric ratio to ensure adequate control of TRO.

We also respectfully request that the acute WET testing requirement be removed as a requirement. Special Condition I.A.19.b. (1) of the existing NPDES permit states that acute toxicity tests be conducted once every 2 months until 6 valid bimonthly tests are completed. On a number of occasions, we have forwarded the Department results of WET test results with a request to discontinue performing toxicity testing.

D-00F (cont.)

However, we have yet to receive permission to discontinue the tests. WET testing over the past several years have shown no toxic effects of applying Clamtrol (Spectrus CT1300) to the RW system (see attached summary of results). Additionally, absent the use of oxidizing biocides, we request that treatment frequency be allowed on not fewer than 14-days. Based on surveys of the RW system, mollusks, particularly oysters, are growing large enough between the 21-day treatments to begin causing problems. The positively charged amine complex of Clamtrol, which provides its inherent biocidal effects, allows it to be rapidly neutralized upon adsorption to many types of naturally occurring organic materials. Once bound, the toxic effects to other aquatic life is greatly reduced or eliminated. Field studies by Betz to measure decay of Clamtrol residual in a cooling tower with makeup and blowdown shut off (i.e. no dilution) confirmed a half-life of approximately 4 hours. Various studies demonstrate that Clamtrol readily biodegrades within a two week period. We believe that use of Clamtrol every 14 days or greater will not result in negative impact.

The current NPDES permit lists the Evaporator Condensate Storage Tank (ECST) and Condensate System (CD) discharges as internal outfalls to D-00F. In this respect, these outfalls are similar to internal outfalls I-0FE (LSSTs) and I-0FG (SDT-1). Please refer to the attached flow diagram.

In order to clarify the permit requirements, we suggest the ECST and CD discharges be broken out from D-00F and given their own internal outfall designations (e.g. I-0FH for the ECSTs and I-0FI for the CD system discharge). See below for additional suggested changes regarding the ECST and CD discharges.

3. Outfall I-0FE – Laundry and Shower Sump Tank (LSST) Discharge

We request that the monitoring frequency for Oil and Grease (O&G), Total Suspended Solids (TSS) and pH be reduced to 1 batch/month for outfall I-0FE. A review of the data for these three parameters over the past permit cycle have shown levels to be well within limits (see attached tables). All other conditions related to this outfall can remain unchanged.

4. Outfall I-0FG – Station Drain Tank – 1 (SDT-1)

We request that the monitoring frequency for Oil and Grease (O&G), Total Suspended Solids (TSS) and pH be reduced to 1 batch/month for outfall I-0FG. A review of the data for these three parameters over the past permit cycle have shown levels to be well within limits (see attached tables). All other conditions related to this outfall can remain unchanged.

5. Outfall D-0C1 – Ash Pond

As stated in Attachment 4, note that we propose this outfall be renamed to: **FGD Blowdown/Stormwater Emergency Overflow**. This area, formerly the old North Ash Pond, has been cleaned of ash and currently contains the FGD Blowdown treatment pond system. Treated wastewater discharge from this pond system is directed to the IWW percolation pond system, but does have an emergency overflow into the old north ash pond basin/perimeter ditch system. This basin also receives storm water runoff from the area surrounding the FGD blowdown pond system.

6. Outfall I-0FH (proposed) – Evaporator Condensate Storage Tank (ECST)

As stated in item 1 above, we believe that the ECST system should be listed as a separate internal outfall. It is essentially treated as such in the current permit under Outfall D-00F, but giving it a separate internal outfall designation would serve to clarify the monitoring requirements associated with the discharge. The sample point for this outfall can remain designated as EFF-7B. We do request that, as with the other internal outfalls I-0FE and I-0FG that sampling frequency for O&G and TSS be reduced to from the current frequency of 1/week to 1/month due to the very good compliance history over the last permit cycle (see attached tables). The sole exceedence was a single day on December 24, 2005 whereby the ECST "B" tank release had a maximum O&G value of 64.2 mg/L. However, the calculated value from D-00F as a result of this release was less than 1.4 mg/L.

7. Outfall I-0FI (proposed) – Condensate System (CD)

As stated in item 1 above, we believe that the CD system, like the ECSTs, should be listed as a separate internal outfall. It also is essentially treated as such in the current permit under Outfall D-00F, but giving it a separate internal outfall designation would again serve to clarify the monitoring requirements associated with the discharge. The sample point for this outfall can remain designated as EFF-7C. We do request that, as with the other internal outfalls I-0FE and I-0FG that sampling frequency for O&G and TSS be reduced to from the current frequency of 1/week to 1/month due to the excellent compliance history over the last permit cycle (see attached tables).

8. New Outfalls HCTS, D-0C2R, HCTS Screen Wash

Descriptions of new outfalls associated with the new Helper Cooling Tower South (HCTS), and the relocation of D-0C1 are provided in Attachment 4 as well as in a NPDES permit modification submittal forwarded to the Department in September 2009.

9. Applicability of Water Quality-Based Effluent Limits

We note that, for several outfalls (e.g. D-00F, D-0C1 and D-0C2) the current NPDES permit imposes Water Quality Based Effluent Limits (WQBELs) on the discharges from these outfalls into the Units 1, 2, & 3 discharge canal. This appears to be a carryover from when USEPA was the permitting authority prior to delegating the NPDES program to Florida.

The Crystal River Energy Complex's existing discharge canal is not waters of the State; instead, it is an essential component of the "point source" or "wastewater facility" for regulatory purposes.

Pursuant to Section 403.0885(2), Florida Statutes, the Department "is empowered to establish a state NPDES program in accordance with Section 402 of the federal Clean Water Act. Requirements under the Clean Water Act are applicable to discharges from point sources that are released into jurisdictional waters. Rule 62-660.400(1), F.A.C. The term "point source" is defined as "any discernible, confined, and discrete conveyance," such as a "ditch" or "channel." Rule 62-620.200(37), F.A.C. Similarly, the term "wastewater facility" means a facility discharging into jurisdictional waters, including a wastewater "transmission system." Rule 62-620.200(55), F.A.C.

Simply put, the Crystal River Energy Complex discharge canal is a classic example of an existing "discrete conveyance" that constitutes part of an existing point source, not jurisdictional waters. As explained in Rule 62-302.520(3)(g), F.A.C., the point of discharge for a thermal discharge is "that point at which the effluent physically leaves its carrying conduit (open or closed), and discharges into the waters of the state...." (Emphasis added.) This confirms that the discharge canal itself is not jurisdictional waters. Note that the existing discharge canal was constructed specifically to transport the Crystal River cooling water from the plant to jurisdictional waters. Because "waste transport" is specifically excluded as a permissible designated use for jurisdictional waters (40 CFR §131.10), it would be illogical and contrary to law to assert that water quality standards (which include designated uses) apply within the discharge canal.

**ATTACHMENT 6 SUPPLEMENTAL
HISTORICAL ANALYTICAL RESULTS**

I-0FE Historical O&G, TSS and pH Data

ATTACHMENT 6 - I-OFE O&G DATA

Start Date	End Date	Parameter/Outfall	Mo. Avg.(mg/L)	Daily Max (mg/L)
7/1/2005	7/31/2005	Oil and Grease - I-OFE (CR3) v2	<1.4	2.6
7/31/2005	8/31/2005	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
8/31/2005	10/1/2005	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
10/1/2005	11/1/2005	Oil and Grease - I-OFE (CR3) v2	2.3	2.3
11/1/2005	12/1/2005	Oil and Grease - I-OFE (CR3) v2	4	4
12/1/2005	1/1/2006	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
1/1/2006	2/1/2006	Oil and Grease - I-OFE (CR3) v2	5.5	5.5
2/1/2006	3/1/2006	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
3/1/2006	4/1/2006	Oil and Grease - I-OFE (CR3) v2	2.12	2.12
4/1/2006	5/1/2006	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
5/1/2006	6/1/2006	Oil and Grease - I-OFE (CR3) v2	4	4
6/1/2006	7/1/2006	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
7/1/2006	8/1/2006	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
8/1/2006	9/1/2006	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
9/1/2006	10/1/2006	Oil and Grease - I-OFE (CR3) v2	3.87	3.87
10/1/2006	11/1/2006	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
11/1/2006	12/1/2006	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
12/1/2006	1/1/2007	Oil and Grease - I-OFE (CR3) v2	<1.4	<1.4
1/1/2007	2/1/2007	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
2/1/2007	3/1/2007	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
3/1/2007	4/1/2007	Oil and Grease - I-OFE (CR3) v2	<1.4	<1.4
4/1/2007	5/1/2007	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
5/1/2007	6/1/2007	Oil and Grease - I-OFE (CR3) v2	<1.4	<1.4
6/1/2007	7/1/2007	Oil and Grease - I-OFE (CR3) v2	2.12	2.12
7/1/2007	8/1/2007	Oil and Grease - I-OFE (CR3) v2	3.63	3.63
8/1/2007	9/1/2007	Oil and Grease - I-OFE (CR3) v2	<1.4	<1.4
9/1/2007	10/1/2007	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
10/1/2007	11/1/2007	Oil and Grease - I-OFE (CR3) v2	<1.4	<1.4
11/1/2007	12/1/2007	Oil and Grease - I-OFE (CR3) v2	8.41	16.25
12/1/2007	1/1/2008	Oil and Grease - I-OFE (CR3) v2	1.98	3.75
1/1/2008	2/1/2008	Oil and Grease - I-OFE (CR3) v2	<1.4	<1.4
2/1/2008	3/1/2008	Oil and Grease - I-OFE (CR3) v2	<1.4	<1.4
3/1/2008	4/1/2008	Oil and Grease - I-OFE (CR3) v2	<1.4	<1.4
4/1/2008	5/1/2008	Oil and Grease - I-OFE (CR3) v2	<1.4	<1.4
5/1/2008	6/1/2008	Oil and Grease - I-OFE (CR3) v2	2.5	2.5
6/1/2008	7/1/2008	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
7/1/2008	8/1/2008	Oil and Grease - I-OFE (CR3) v2	<1.4	<1.4
8/1/2008	9/1/2008	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
9/1/2008	10/1/2008	Oil and Grease - I-OFE (CR3) v2	2.34	2.34
10/1/2008	11/1/2008	Oil and Grease - I-OFE (CR3) v2	1.5	1.5
11/1/2008	12/1/2008	Oil and Grease - I-OFE (CR3) v2	<1.4	<1.4
12/1/2008	1/1/2009	Oil and Grease - I-OFE (CR3) v2	1.62	1.62
1/1/2009	2/1/2009	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
2/1/2009	3/1/2009	Oil and Grease - I-OFE (CR3) v2	<1.4	<1.4
3/1/2009	4/1/2009	Oil and Grease - I-OFE (CR3) v2	<1.4	<1.4
4/1/2009	5/1/2009	Oil and Grease - I-OFE (CR3) v2	<1.4	<1.4
5/1/2009	6/1/2009	Oil and Grease - I-OFE (CR3) v2	2	2
6/1/2009	7/1/2009	Oil and Grease - I-OFE (CR3) v2	7.37	7.37
7/1/2009	8/1/2009	Oil and Grease - I-OFE (CR3) v2	NOD	NOD
8/1/2009	9/1/2009	Oil and Grease - I-OFE (CR3) v2	6	6

NOD = No discharge for the month

ATTACHMENT 6 - I-0FE TSS DATA

Start Date	End Date	Parameter/Outfall	Mo. Avg.(mg/L)	Daily Max (mg/L)
7/1/2005	7/31/2005	TSS - I-0FE (CR3) v2	2.7	5.4
7/31/2005	8/31/2005	TSS - I-0FE (CR3) v2	NOD	NOD
8/31/2005	10/1/2005	TSS - I-0FE (CR3) v2	NOD	NOD
10/1/2005	11/1/2005	TSS - I-0FE (CR3) v2	0.3	0.3
11/1/2005	12/1/2005	TSS - I-0FE (CR3) v2	3	3
12/1/2005	1/1/2006	TSS - I-0FE (CR3) v2	NOD	NOD
1/1/2006	2/1/2006	TSS - I-0FE (CR3) v2	3.3	3.9
2/1/2006	3/1/2006	TSS - I-0FE (CR3) v2	NOD	NOD
3/1/2006	4/1/2006	TSS - I-0FE (CR3) v2	11.3	11.3
4/1/2006	5/1/2006	TSS - I-0FE (CR3) v2	NOD	NOD
5/1/2006	6/1/2006	TSS - I-0FE (CR3) v2	29	29
6/1/2006	7/1/2006	TSS - I-0FE (CR3) v2	NOD	NOD
7/1/2006	8/1/2006	TSS - I-0FE (CR3) v2	NOD	NOD
8/1/2006	9/1/2006	TSS - I-0FE (CR3) v2	NOD	NOD
9/1/2006	10/1/2006	TSS - I-0FE (CR3) v2	11.3	11.3
10/1/2006	11/1/2006	TSS - I-0FE (CR3) v2	NOD	NOD
11/1/2006	12/1/2006	TSS - I-0FE (CR3) v2	NOD	NOD
12/1/2006	1/1/2007	TSS - I-0FE (CR3) v2	NOD	NOD
1/1/2007	2/1/2007	TSS - I-0FE (CR3) v2	NOD	NOD
2/1/2007	3/1/2007	TSS - I-0FE (CR3) v2	NOD	NOD
3/1/2007	4/1/2007	TSS - I-0FE (CR3) v2	9.20	9.20
4/1/2007	5/1/2007	TSS - I-0FE (CR3) v2	NOD	NOD
5/1/2007	6/1/2007	TSS - I-0FE (CR3) v2	0.3	0.3
6/1/2007	7/1/2007	TSS - I-0FE (CR3) v2	1.9	1.9
7/1/2007	8/1/2007	TSS - I-0FE (CR3) v2	0	0
8/1/2007	9/1/2007	TSS - I-0FE (CR3) v2	2.6	2.6
9/1/2007	10/1/2007	TSS - I-0FE (CR3) v2	NOD	NOD
10/1/2007	11/1/2007	TSS - I-0FE (CR3) v2	5.3	5.3
11/1/2007	12/1/2007	TSS - I-0FE (CR3) v2	7.91	9.5
12/1/2007	1/1/2008	TSS - I-0FE (CR3) v2	7.97	11.8
1/1/2008	2/1/2008	TSS - I-0FE (CR3) v2	<4.0	<4.0
2/1/2008	3/1/2008	TSS - I-0FE (CR3) v2	<4.0	<4.0
3/1/2008	4/1/2008	TSS - I-0FE (CR3) v2	<4.0	<4.0
4/1/2008	5/1/2008	TSS - I-0FE (CR3) v2	5.8	5.8
5/1/2008	6/1/2008	TSS - I-0FE (CR3) v2	<4.0	<4.0
6/1/2008	7/1/2008	TSS - I-0FE (CR3) v2	NOD	NOD
7/1/2008	8/1/2008	TSS - I-0FE (CR3) v2	<4.0	<4.0
8/1/2008	9/1/2008	TSS - I-0FE (CR3) v2	NOD	NOD
9/1/2008	10/1/2008	TSS - I-0FE (CR3) v2	<4	<4
10/1/2008	11/1/2008	TSS - I-0FE (CR3) v2	<4	<4
11/1/2008	12/1/2008	TSS - I-0FE (CR3) v2	<4	<4
12/1/2008	1/1/2009	TSS - I-0FE (CR3) v2	<4	<4
1/1/2009	2/1/2009	TSS - I-0FE (CR3) v2	NOD	NOD
2/1/2009	3/1/2009	TSS - I-0FE (CR3) v2	< 4	< 4
3/1/2009	4/1/2009	TSS - I-0FE (CR3) v2	< 4	< 4
4/1/2009	5/1/2009	TSS - I-0FE (CR3) v2	10.3	10.3
5/1/2009	6/1/2009	TSS - I-0FE (CR3) v2	10.2	10.2
6/1/2009	7/1/2009	TSS - I-0FE (CR3) v2	8.10	8.10
7/1/2009	8/1/2009	TSS - I-0FE (CR3) v2	NOD	NOD
8/1/2009	9/1/2009	TSS - I-0FE (CR3) v2	5.45	5.45

NOD = No discharge for the month

ATTACHMENT 6 - I-OFE pH DATA

Start Date	End Date	Parameter/Outfall	mo. min	mo. max.
7/1/2005	7/31/2005	pH - I-OFE (CR3) v2	7.01	7.35
7/31/2005	8/31/2005	pH - I-OFE (CR3) v2	NOD	NOD
8/31/2005	10/1/2005	pH - I-OFE (CR3) v2	NOD	NOD
10/1/2005	11/1/2005	pH - I-OFE (CR3) v2	6.74	6.74
11/1/2005	12/1/2005	pH - I-OFE (CR3) v2	7.29	7.29
12/1/2005	1/1/2006	pH - I-OFE (CR3) v2	NOD	NOD
1/1/2006	2/1/2006	pH - I-OFE (CR3) v2	6.95	7.08
2/1/2006	3/1/2006	pH - I-OFE (CR3) v2	NOD	NOD
3/1/2006	4/1/2006	pH - I-OFE (CR3) v2	6.77	6.77
4/1/2006	5/1/2006	pH - I-OFE (CR3) v2	NOD	NOD
5/1/2006	6/1/2006	pH - I-OFE (CR3) v2	6.53	6.53
6/1/2006	7/1/2006	pH - I-OFE (CR3) v2	NOD	NOD
7/1/2006	8/1/2006	pH - I-OFE (CR3) v2	NOD	NOD
8/1/2006	9/1/2006	pH - I-OFE (CR3) v2	NOD	NOD
9/1/2006	10/1/2006	pH - I-OFE (CR3) v2	7.13	7.13
10/1/2006	11/1/2006	pH - I-OFE (CR3) v2	NOD	NOD
11/1/2006	12/1/2006	pH - I-OFE (CR3) v2	NOD	NOD
12/1/2006	1/1/2007	pH - I-OFE (CR3) v2	6.62	6.62
1/1/2007	2/1/2007	pH - I-OFE (CR3) v2	NOD	NOD
2/1/2007	3/1/2007	pH - I-OFE (CR3) v2	NOD	NOD
3/1/2007	4/1/2007	pH - I-OFE (CR3) v2	6.11	6.11
4/1/2007	5/1/2007	pH - I-OFE (CR3) v2	NOD	NOD
5/1/2007	6/1/2007	pH - I-OFE (CR3) v2	6.34	6.34
6/1/2007	7/1/2007	pH - I-OFE (CR3) v2	6.65	6.65
7/1/2007	8/1/2007	pH - I-OFE (CR3) v2	6.7	6.7
8/1/2007	9/1/2007	pH - I-OFE (CR3) v2	6.87	6.87
9/1/2007	10/1/2007	pH - I-OFE (CR3) v2	NOD	NOD
10/1/2007	11/1/2007	pH - I-OFE (CR3) v2	6.9	6.9
11/1/2007	12/1/2007	pH - I-OFE (CR3) v2	7.09	7.86
12/1/2007	1/1/2008	pH - I-OFE (CR3) v2	7.28	7.77
1/1/2008	2/1/2008	pH - I-OFE (CR3) v2	6.3	6.88
2/1/2008	3/1/2008	pH - I-OFE (CR3) v2	6.41	6.51
3/1/2008	4/1/2008	pH - I-OFE (CR3) v2	6.96	6.96
4/1/2008	5/1/2008	pH - I-OFE (CR3) v2	7.21	7.21
5/1/2008	6/1/2008	pH - I-OFE (CR3) v2	7.28	7.28
6/1/2008	7/1/2008	pH - I-OFE (CR3) v2	NOD	NOD
7/1/2008	8/1/2008	pH - I-OFE (CR3) v2	6.94	6.94
8/1/2008	9/1/2008	pH - I-OFE (CR3) v2	NOD	NOD
9/1/2008	10/1/2008	pH - I-OFE (CR3) v2	6.75	6.75
10/1/2008	11/1/2008	pH - I-OFE (CR3) v2	6.84	6.84
11/1/2008	12/1/2008	pH - I-OFE (CR3) v2	7.05	7.05
12/1/2008	1/1/2009	pH - I-OFE (CR3) v2	7.11	7.11
1/1/2009	2/1/2009	pH - I-OFE (CR3) v2	NOD	NOD
2/1/2009	3/1/2009	pH - I-OFE (CR3) v2	6.95	6.95
3/1/2009	4/1/2009	pH - I-OFE (CR3) v2	6.84	6.84
4/1/2009	5/1/2009	pH - I-OFE (CR3) v2	6.04	6.04
5/1/2009	6/1/2009	pH - I-OFE (CR3) v2	6.1	6.1
6/1/2009	7/1/2009	pH - I-OFE (CR3) v2	6.52	6.52
7/1/2009	8/1/2009	pH - I-OFE (CR3) v2	NOD	NOD
8/1/2009	9/1/2009	pH - I-OFE (CR3) v2	6.86	6.86

NOD = No discharge for the month

ECST and CD Historical O&G and TSS Data

ATTACHMENT 6 - CD and ECST O&G Data

Start Date	End Date	Parameter/Outfall	Mo. Avg.(mg/L)	Daily Max (mg/L)
7/1/2005	8/1/2005	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	2.2
8/1/2005	9/1/2005	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	3.9
9/1/2005	10/1/2005	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	6.3
10/1/2005	11/1/2005	Oil and Grease - CD and ECST D0F (CR3)	3.37	8.4
11/1/2005	12/1/2005	Oil and Grease - CD and ECST D0F (CR3)	2.01	4.2
12/1/2005	1/1/2006	Oil and Grease - CD and ECST D0F (CR3)	8.36	64.2
1/1/2006	2/1/2006	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	5
2/1/2006	3/1/2006	Oil and Grease - CD and ECST D0F (CR3)	1.71	4.75
3/1/2006	4/1/2006	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	2.12
4/1/2006	5/1/2006	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
5/1/2006	6/1/2006	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
6/1/2006	7/1/2006	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
7/1/2006	8/1/2006	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
8/1/2006	9/1/2006	Oil and Grease - CD and ECST D0F (CR3)	1.51	2.75
9/1/2006	10/1/2006	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
10/1/2006	11/1/2006	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
11/1/2006	12/1/2006	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
12/1/2006	1/1/2007	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	3.37
1/1/2007	2/1/2007	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
2/1/2007	3/1/2007	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
3/1/2007	4/1/2007	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	2
4/1/2007	5/1/2007	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
5/1/2007	6/1/2007	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	5.38
6/1/2007	7/1/2007	Oil and Grease - CD and ECST D0F (CR3)	1.83	5.38
7/1/2007	8/1/2007	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	2.25
8/1/2007	9/1/2007	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
9/1/2007	10/1/2007	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
10/1/2007	11/1/2007	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	2.38
11/1/2007	12/1/2007	Oil and Grease - CD and ECST D0F (CR3)	2.06	4.12
12/1/2007	1/1/2008	Oil and Grease - CD and ECST D0F (CR3)	5.29	5.77
1/1/2008	2/1/2008	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
2/1/2008	3/1/2008	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	1.62
3/1/2008	4/1/2008	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
4/1/2008	5/1/2008	Oil and Grease - CD and ECST D0F (CR3)	1.54	4.75
5/1/2008	6/1/2008	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
6/1/2008	7/1/2008	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	2.38
7/1/2008	8/1/2008	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
8/1/2008	9/1/2008	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
9/1/2008	10/1/2008	Oil and Grease - CD and ECST D0F (CR3)	1.4	3.75
10/1/2008	11/1/2008	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
11/1/2008	12/1/2008	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
12/1/2008	1/1/2009	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	2
1/1/2009	2/1/2009	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	2
2/1/2009	3/1/2009	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	2.38
3/1/2009	4/1/2009	Oil and Grease - CD and ECST D0F (CR3)	1.75	3.25
4/1/2009	5/1/2009	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
5/1/2009	6/1/2009	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
6/1/2009	7/1/2009	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	1.5
7/1/2009	8/1/2009	Oil and Grease - CD and ECST D0F (CR3)	< 1.4	< 1.4
8/1/2009	9/1/2009	Oil and Grease - CD and ECST D0F (CR3)	3.12	5.45

Note that the high value measured during December 2005 did not result in an exceedence of the O&G limit at outfall D-00F. The calculated value at D-00F was less than 1.4 mg/L.

ATTACHMENT 6 - CD and ECST TSS Data

Start Date	End Date	Parameter/Outfall	Mo. Avg.(mg/L)	Daily Max (mg/L)
7/1/2005	8/1/2005	TSS - CD and ECST D-00F (CR3) v2	NOD	NOD
8/1/2005	9/1/2005	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
9/1/2005	10/1/2005	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
10/1/2005	11/1/2005	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
11/1/2005	12/1/2005	TSS - CD and ECST D-00F (CR3) v2	< 4	4.2
12/1/2005	1/1/2006	TSS - CD and ECST D-00F (CR3) v2	< 4	9.3
1/1/2006	2/1/2006	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
2/1/2006	3/1/2006	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
3/1/2006	4/1/2006	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
4/1/2006	5/1/2006	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
5/1/2006	6/1/2006	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
6/1/2006	7/1/2006	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
7/1/2006	8/1/2006	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
8/1/2006	9/1/2006	TSS - CD and ECST D-00F (CR3) v2	< 4	4.8
9/1/2006	10/1/2006	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
10/1/2006	11/1/2006	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
11/1/2006	12/1/2006	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
12/1/2006	1/1/2007	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
1/1/2007	2/1/2007	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
2/1/2007	3/1/2007	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
3/1/2007	4/1/2007	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
4/1/2007	5/1/2007	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
5/1/2007	6/1/2007	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
6/1/2007	7/1/2007	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
7/1/2007	8/1/2007	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
8/1/2007	9/1/2007	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
9/1/2007	10/1/2007	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
10/1/2007	11/1/2007	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
11/1/2007	12/1/2007	TSS - CD and ECST D-00F (CR3) v2	1.91	2.5
12/1/2007	1/1/2008	TSS - CD and ECST D-00F (CR3) v2	3.45	8.56
1/1/2008	2/1/2008	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
2/1/2008	3/1/2008	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
3/1/2008	4/1/2008	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
4/1/2008	5/1/2008	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
5/1/2008	6/1/2008	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
6/1/2008	7/1/2008	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
7/1/2008	8/1/2008	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
8/1/2008	9/1/2008	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
9/1/2008	10/1/2008	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
10/1/2008	11/1/2008	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
11/1/2008	12/1/2008	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
12/1/2008	1/1/2009	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
1/1/2009	2/1/2009	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
2/1/2009	3/1/2009	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
3/1/2009	4/1/2009	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
4/1/2009	5/1/2009	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
5/1/2009	6/1/2009	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
6/1/2009	7/1/2009	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
7/1/2009	8/1/2009	TSS - CD and ECST D-00F (CR3) v2	< 4	< 4
8/1/2009	9/1/2009	TSS - CD and ECST D-00F (CR3) v2	< 4	5.2

NOD = No discharge for the month

I-0FG Historical O&G, TSS and pH Data

ATTACHMENT 6 - I-0FG O&G DATA

Start Date	End Date	Parameter/Outfall	Mo. Avg.(mg/L)	Daily Max (mg/L)
7/1/2005	7/31/2005	Oil and Grease - I-0FG (CR3) v2	< 1.4	2.7
7/31/2005	8/31/2005	Oil and Grease - I-0FG (CR3) v2	< 1.4	2.7
8/31/2005	10/1/2005	Oil and Grease - I-0FG (CR3) v2	1.43	4.9
10/1/2005	11/1/2005	Oil and Grease - I-0FG (CR3) v2	3.19	6.2
11/1/2005	12/1/2005	Oil and Grease - I-0FG (CR3) v2	6.2	6.3
12/1/2005	1/1/2006	Oil and Grease - I-0FG (CR3) v2	6.51	12.3
1/1/2006	2/1/2006	Oil and Grease - I-0FG (CR3) v2	1.97	3.37
2/1/2006	3/1/2006	Oil and Grease - I-0FG (CR3) v2	3.07	6.5
3/1/2006	4/1/2006	Oil and Grease - I-0FG (CR3) v2	2.43	2.5
4/1/2006	5/1/2006	Oil and Grease - I-0FG (CR3) v2	< 1.4	< 1.4
5/1/2006	6/1/2006	Oil and Grease - I-0FG (CR3) v2	< 1.4	3.37
6/1/2006	7/1/2006	Oil and Grease - I-0FG (CR3) v2	< 1.4	2
7/1/2006	8/1/2006	Oil and Grease - I-0FG (CR3) v2	< 1.4	1.75
8/1/2006	9/1/2006	Oil and Grease - I-0FG (CR3) v2	2.13	4
9/1/2006	10/1/2006	Oil and Grease - I-0FG (CR3) v2	1.79	2.43
10/1/2006	11/1/2006	Oil and Grease - I-0FG (CR3) v2	2.35	4.87
11/1/2006	12/1/2006	Oil and Grease - I-0FG (CR3) v2	< 1.4	< 1.4
12/1/2006	1/1/2007	Oil and Grease - I-0FG (CR3) v2	2.39	2.88
1/1/2007	2/1/2007	Oil and Grease - I-0FG (CR3) v2	< 1.4	3
2/1/2007	3/1/2007	Oil and Grease - I-0FG (CR3) v2	1.72	3.36
3/1/2007	4/1/2007	Oil and Grease - I-0FG (CR3) v2	2.02	5.12
4/1/2007	5/1/2007	Oil and Grease - I-0FG (CR3) v2	3.47	9.37
5/1/2007	6/1/2007	Oil and Grease - I-0FG (CR3) v2	< 1.4	3
6/1/2007	7/1/2007	Oil and Grease - I-0FG (CR3) v2	2.08	4.25
7/1/2007	8/1/2007	Oil and Grease - I-0FG (CR3) v2	< 1.4	1.63
8/1/2007	9/1/2007	Oil and Grease - I-0FG (CR3) v2	< 1.4	3
9/1/2007	10/1/2007	Oil and Grease - I-0FG (CR3) v2	2.67	4.25
10/1/2007	11/1/2007	Oil and Grease - I-0FG (CR3) v2	< 1.4	2.75
11/1/2007	12/1/2007	Oil and Grease - I-0FG (CR3) v2	< 1.4	2.13
12/1/2007	1/1/2008	Oil and Grease - I-0FG (CR3) v2	1.46	3
1/1/2008	2/1/2008	Oil and Grease - I-0FG (CR3) v2	<1.4	<1.4
2/1/2008	3/1/2008	Oil and Grease - I-0FG (CR3) v2	<1.4	2.13
3/1/2008	4/1/2008	Oil and Grease - I-0FG (CR3) v2	<1.4	2.38
4/1/2008	5/1/2008	Oil and Grease - I-0FG (CR3) v2	<1.4	1.5
5/1/2008	6/1/2008	Oil and Grease - I-0FG (CR3) v2	<1.4	2
6/1/2008	7/1/2008	Oil and Grease - I-0FG (CR3) v2	<1.4	1.5
7/1/2008	8/1/2008	Oil and Grease - I-0FG (CR3) v2	1.74	3.85
8/1/2008	9/1/2008	Oil and Grease - I-0FG (CR3) v2	1.41	5.75
9/1/2008	10/1/2008	Oil and Grease - I-0FG (CR3) v2	1.43	4.37
10/1/2008	11/1/2008	Oil and Grease - I-0FG (CR3) v2	<1.4	2.38
11/1/2008	12/1/2008	Oil and Grease - I-0FG (CR3) v2	2.54	10.5
12/1/2008	1/1/2009	Oil and Grease - I-0FG (CR3) v2	1.46	5.75
1/1/2009	2/1/2009	Oil and Grease - I-0FG (CR3) v2	1.4	2.63
2/1/2009	3/1/2009	Oil and Grease - I-0FG (CR3) v2	2.07	8
3/1/2009	4/1/2009	Oil and Grease - I-0FG (CR3) v2	<1.4	2.63
4/1/2009	5/1/2009	Oil and Grease - I-0FG (CR3) v2	<1.4	<1.4
5/1/2009	6/1/2009	Oil and Grease - I-0FG (CR3) v2	<1.4	<1.4
6/1/2009	7/1/2009	Oil and Grease - I-0FG (CR3) v2	<1.4	2.5
7/1/2009	8/1/2009	Oil and Grease - I-0FG (CR3) v2	<1.4	5.13
8/1/2009	9/1/2009	Oil and Grease - I-0FG (CR3) v2	3.53	18

ATTACHMENT 6 - I-0FG TSS DATA

Start Date	End Date	Parameter/Outfall	Mo. Avg.(mg/L)	Daily Max (mg/L)
7/1/2005	7/31/2005	TSS - I-0FG (CR3) v2	7.2	14.6
7/31/2005	8/31/2005	TSS - I-0FG (CR3) v2	3.1	10.3
8/31/2005	10/1/2005	TSS - I-0FG (CR3) v2	2.6	8.5
10/1/2005	11/1/2005	TSS - I-0FG (CR3) v2	17.59	32.6
11/1/2005	12/1/2005	TSS - I-0FG (CR3) v2	9.4	12.6
12/1/2005	1/1/2006	TSS - I-0FG (CR3) v2	8.4	10
1/1/2006	2/1/2006	TSS - I-0FG (CR3) v2	8.57	16.3
2/1/2006	3/1/2006	TSS - I-0FG (CR3) v2	6.71	20
3/1/2006	4/1/2006	TSS - I-0FG (CR3) v2	4.97	9.3
4/1/2006	5/1/2006	TSS - I-0FG (CR3) v2	6.93	11.8
5/1/2006	6/1/2006	TSS - I-0FG (CR3) v2	12.72	24
6/1/2006	7/1/2006	TSS - I-0FG (CR3) v2	9.87	17.7
7/1/2006	8/1/2006	TSS - I-0FG (CR3) v2	7.61	12.7
8/1/2006	9/1/2006	TSS - I-0FG (CR3) v2	9.01	10.3
9/1/2006	10/1/2006	TSS - I-0FG (CR3) v2	15.53	35.2
10/1/2006	11/1/2006	TSS - I-0FG (CR3) v2	26.6	41.6
11/1/2006	12/1/2006	TSS - I-0FG (CR3) v2	24.15	34.2
12/1/2006	1/1/2007	TSS - I-0FG (CR3) v2	25.1	32.6
1/1/2007	2/1/2007	TSS - I-0FG (CR3) v2	12.97	23.7
2/1/2007	3/1/2007	TSS - I-0FG (CR3) v2	9.91	16.5
3/1/2007	4/1/2007	TSS - I-0FG (CR3) v2	12.72	23.8
4/1/2007	5/1/2007	TSS - I-0FG (CR3) v2	24.34	57.4
5/1/2007	6/1/2007	TSS - I-0FG (CR3) v2	10.37	28.4
6/1/2007	7/1/2007	TSS - I-0FG (CR3) v2	12.75	27.8
7/1/2007	8/1/2007	TSS - I-0FG (CR3) v2	5.27	9.6
8/1/2007	9/1/2007	TSS - I-0FG (CR3) v2	12.98	27.8
9/1/2007	10/1/2007	TSS - I-0FG (CR3) v2	20.7	24.4
10/1/2007	11/1/2007	TSS - I-0FG (CR3) v2	7.45	9.5
11/1/2007	12/1/2007	TSS - I-0FG (CR3) v2	25.1	52.2
12/1/2007	1/1/2008	TSS - I-0FG (CR3) v2	10.37	17.9
1/1/2008	2/1/2008	TSS - I-0FG (CR3) v2	10.44	12.5
2/1/2008	3/1/2008	TSS - I-0FG (CR3) v2	16.72	35.1
3/1/2008	4/1/2008	TSS - I-0FG (CR3) v2	9.03	13.4
4/1/2008	5/1/2008	TSS - I-0FG (CR3) v2	10.59	22.4
5/1/2008	6/1/2008	TSS - I-0FG (CR3) v2	25.81	43
6/1/2008	7/1/2008	TSS - I-0FG (CR3) v2	14.25	26.2
7/1/2008	8/1/2008	TSS - I-0FG (CR3) v2	22.74	33.3
8/1/2008	9/1/2008	TSS - I-0FG (CR3) v2	22.24	40.7
9/1/2008	10/1/2008	TSS - I-0FG (CR3) v2	9.65	25.7
10/1/2008	11/1/2008	TSS - I-0FG (CR3) v2	7.62	9.5
11/1/2008	12/1/2008	TSS - I-0FG (CR3) v2	10.09	19.9
12/1/2008	1/1/2009	TSS - I-0FG (CR3) v2	20.68	37.6
1/1/2009	2/1/2009	TSS - I-0FG (CR3) v2	14.38	23.7
2/1/2009	3/1/2009	TSS - I-0FG (CR3) v2	13.95	23.9
3/1/2009	4/1/2009	TSS - I-0FG (CR3) v2	12.68	22.5
4/1/2009	5/1/2009	TSS - I-0FG (CR3) v2	11.08	14.9
5/1/2009	6/1/2009	TSS - I-0FG (CR3) v2	7.67	13.9
6/1/2009	7/1/2009	TSS - I-0FG (CR3) v2	8.73	15.5
7/1/2009	8/1/2009	TSS - I-0FG (CR3) v2	7.3	10.6
8/1/2009	9/1/2009	TSS - I-0FG (CR3) v2	15.44	51.8

ATTACHMENT 6 - I-0FG pH DATA

Start Date	End Date	Parameter/Outfall	mo. min	mo. max.
7/1/2005	7/31/2005	pH - I-0FG (CR3) v2	8.61	8.99
7/31/2005	8/31/2005	pH - I-0FG (CR3) v2	8.05	8.85
8/31/2005	10/1/2005	pH - I-0FG (CR3) v2	8.64	8.96
10/1/2005	11/1/2005	pH - I-0FG (CR3) v2	8.39	8.9
11/1/2005	12/1/2005	pH - I-0FG (CR3) v2	8.25	8.58
12/1/2005	1/1/2006	pH - I-0FG (CR3) v2	7.72	8.83
1/1/2006	2/1/2006	pH - I-0FG (CR3) v2	8.52	8.9
2/1/2006	3/1/2006	pH - I-0FG (CR3) v2	8.55	8.75
3/1/2006	4/1/2006	pH - I-0FG (CR3) v2	8.48	8.55
4/1/2006	5/1/2006	pH - I-0FG (CR3) v2	8.48	8.96
5/1/2006	6/1/2006	pH - I-0FG (CR3) v2	8.76	8.93
6/1/2006	7/1/2006	pH - I-0FG (CR3) v2	8.38	8.46
7/1/2006	8/1/2006	pH - I-0FG (CR3) v2	8.31	8.71
8/1/2006	9/1/2006	pH - I-0FG (CR3) v2	8.26	8.86
9/1/2006	10/1/2006	pH - I-0FG (CR3) v2	8.36	8.73
10/1/2006	11/1/2006	pH - I-0FG (CR3) v2	8.10	8.79
11/1/2006	12/1/2006	pH - I-0FG (CR3) v2	8.38	8.96
12/1/2006	1/1/2007	pH - I-0FG (CR3) v2	8.63	8.91
1/1/2007	2/1/2007	pH - I-0FG (CR3) v2	8.52	8.96
2/1/2007	3/1/2007	pH - I-0FG (CR3) v2	8.50	8.95
3/1/2007	4/1/2007	pH - I-0FG (CR3) v2	8.45	8.98
4/1/2007	5/1/2007	pH - I-0FG (CR3) v2	8.56	8.97
5/1/2007	6/1/2007	pH - I-0FG (CR3) v2	8.60	8.91
6/1/2007	7/1/2007	pH - I-0FG (CR3) v2	8.48	8.92
7/1/2007	8/1/2007	pH - I-0FG (CR3) v2	8.56	8.98
8/1/2007	9/1/2007	pH - I-0FG (CR3) v2	8.56	8.98
9/1/2007	10/1/2007	pH - I-0FG (CR3) v2	8.75	8.91
10/1/2007	11/1/2007	pH - I-0FG (CR3) v2	8.37	8.87
11/1/2007	12/1/2007	pH - I-0FG (CR3) v2	7.55	8.71
12/1/2007	1/1/2008	pH - I-0FG (CR3) v2	7.68	8.84
1/1/2008	2/1/2008	pH - I-0FG (CR3) v2	8.46	8.77
2/1/2008	3/1/2008	pH - I-0FG (CR3) v2	7.73	8.94
3/1/2008	4/1/2008	pH - I-0FG (CR3) v2	7.79	8.59
4/1/2008	5/1/2008	pH - I-0FG (CR3) v2	8.64	8.9
5/1/2008	6/1/2008	pH - I-0FG (CR3) v2	8.52	8.85
6/1/2008	7/1/2008	pH - I-0FG (CR3) v2	8.41	8.86
7/1/2008	8/1/2008	pH - I-0FG (CR3) v2	8.10	8.99
8/1/2008	9/1/2008	pH - I-0FG (CR3) v2	8.21	8.91
9/1/2008	10/1/2008	pH - I-0FG (CR3) v2	8.58	8.94
10/1/2008	11/1/2008	pH - I-0FG (CR3) v2	6.62	8.8
11/1/2008	12/1/2008	pH - I-0FG (CR3) v2	8.33	8.66
12/1/2008	1/1/2009	pH - I-0FG (CR3) v2	7.88	8.89
1/1/2009	2/1/2009	pH - I-0FG (CR3) v2	8.06	8.89
2/1/2009	3/1/2009	pH - I-0FG (CR3) v2	8.23	8.98
3/1/2009	4/1/2009	pH - I-0FG (CR3) v2	7.88	8.99
4/1/2009	5/1/2009	pH - I-0FG (CR3) v2	6.05	8.98
5/1/2009	6/1/2009	pH - I-0FG (CR3) v2	8.20	8.88
6/1/2009	7/1/2009	pH - I-0FG (CR3) v2	8.10	8.44
7/1/2009	8/1/2009	pH - I-0FG (CR3) v2	7.81	8.46
8/1/2009	9/1/2009	pH - I-0FG (CR3) v2	7.00	8.73

SUMMARY OF D-00F HISTORICAL WET RESULTS

Summary of Whole Effluent Toxicity (WET) Test Results

The following table summarizes acute WET test results required during the Clamtrol (Spectrus CT1300) treatment of the Nuclear Services Heat Decay System (also known as the Raw Water or RW system) that discharges via outfall D-00F.

The current permit requirement, effective July 2005, was to conduct six (6) bi-monthly acute WET tests per protocol outlined in Special Condition I.A.19.b.1 of the NPDES permit. Through September 2009, CR3 has conducted 27 bi-monthly acute WET tests involving over 100 sample collections, which is well beyond the permit requirement. A summary of results is provided on the attached table. Also attached is a summary of maximum Clamtrol concentrations within the RW system reported on the DMRs.

You'll note from the attached table that samples collected on Feb. 6, 2006 were declared invalid due to the failure of control samples. The January 2008 low survival of the 4:00 PM sample is explained by the low survival in the background (i.e. intake) sample collection.

The only valid failure appeared to be low survival noted from the 10AM sample on May 7 2008. However, a follow-up routine sample collected on May 28, 2008 indicated no unusual mortality. Additionally, maximum Clamtrol concentrations measured during May were well within historical discharge concentrations. Definitive dilution series tests involving the 10AM sample were performed on July 8, July 29 and September 9, 2008 (no Clamtrol treatments were performed during August, 2008 as a consequence of Tropical Storm Fay, hence no toxicity testing was performed during August). Results from the definitive testing showed no dose-related response. Samples collected since that time have shown no unusual mortality. All indications are that the 10AM sample result on May 7, 2008 was an outlier.

For these reasons, we believe that no further acute toxicity testing relative to Spectrus CT1300 treatment of the RW system at CR3 are necessary and that this requirement should be removed from the reissued permit.

Crystal River Unit 3 Clam-trol Toxicity Testing Survival Summary - RW Flume

	D-00F Discharge Samples								Intake Samples				Control	
	10:00am		4:00pm		10:00pm		4:00am		10:00am		10:00pm			
	Mysid	Silver	Mysid	Silver	Mysid	Silver	Mysid	Silver	Int M	Int S	Int M	Int S	Mysid	Silver
	% Surv.	% Surv.	% Surv.	% Surv.	% Surv.	% Surv.	% Surv.	% Surv.	% Surv.	% Surv.	% Surv.	% Surv.	% Surv.	% Surv.
7/19/2005	97.5	100	100	100	92.5	100	90	97.5	92.5	100	90	100	97.5	97.5
9/7/2005	100	100	100	100	97.5	100	90	100	100	100	100	100	100	100
12/12/2005	95	100	90	100	82.5	100	90	100	95	97.5	95	100	100	100
2/7/2006	invalid	100	invalid	100	invalid	100	invalid	100	invalid	100	invalid	100	high M	100
3/7/2006	82.5	100	100	100	100	100	100	97.5	95	100	100	100	100	100
5/1/2006	missed	sample												
7/20/2006	92.5	100	95	100	90	100	100	100	100	100	97.5	100	100	100
9/26/2006	100	97.5	100	96.7	100	100	100	100	100	100	100	100	97.5	97.5
11/14/2006	92.5	100	97.5	100	95	100	97.5	100	97.5	97.5	100	100	100	100
1/16/2007	95	100	100	97.5	100	100	97.5	100	100	100	100	100	100	100
3/20/2007	82.5	97.5	100	100	95	97.5	97.5	100	100	100	100	100	100	100
5/22/2007	92.5	100	100	100	89.7	97.5	97.4	97.5	100	97.5	97.5	97.5	100	100
7/24/2007	97.5	100	80	100	97.5	100	100	100	100	100	100	100	92.5	97.5
9/26/2007	85	100	87.5	100	87.5	97.4	85	100	85	100	77.5	100	95	100
11/21/2007	100	100	100	97.5	100	100	100	100	100	100	100	97.5	97.5	100
1/9/2008	95	95	70	100	82.5	100	85	100	67.5	95	75	97.5	100	100
3/26/2008	97.5	100	100	97.5	100	100	100	100	97.5	97.5	90	100	97.5	100
5/7/2008	47.5	100	82.5	100	97.5	100	97.5	100	97.5	100	97.5	97.5	100	100
5/28/2008	92.5	95	90	100	80	95	92.5	95	97.5	97.5	87.5	95	100	100
7/8/2008 D	100		100		100		95		97.5		97.5		90	
7/29/2008 D	100								92.5				95	
9/9/2008 D	90								100				95	
11/12/2008	97.5	100	100	97.5	96.7	100	96.7	97.5	100	92.5	100	95	97.5	97.5
1/20/2009	97.5	95	100	90	100	97.5	100	95	97.5	92.5	100	97.5	100	97.5
3/3/2009	100	97.5	100	95	100	100	100	100	100	97.5	97.5	100	100	100
5/5/2009	100	100	100	100	100	95	100	95	100	97.5	100	90	100	97.5
7/7/2009	95	97.5	90	100	92.5	97.5	100	100	97.5	97.5	97.5	97.5	97.5	100
9/8/2009	95	100	92.5	100	85	100	92.5	100	92.5	100	95	100	92.5	100

Spectrus CT1300 (Clamtrol) Concentration

Start Date	End Date	Parameter/Outfall	Max. Concentr. (mg/L)
7/1/2005	8/1/2005	Spectrus CT1300 - D00F (CR3) v2	2.3
8/1/2005	9/1/2005	Spectrus CT1300 - D00F (CR3) v2	2.25
9/1/2005	10/1/2005	Spectrus CT1300 - D00F (CR3) v2	2.3
10/1/2005	11/1/2005	Spectrus CT1300 - D00F (CR3) v2	2.3
11/1/2005	12/1/2005	Spectrus CT1300 - D00F (CR3) v2	NOD
12/1/2005	1/1/2006	Spectrus CT1300 - D00F (CR3) v2	2.13
1/1/2006	2/1/2006	Spectrus CT1300 - D00F (CR3) v2	2.3
2/1/2006	3/1/2006	Spectrus CT1300 - D00F (CR3) v2	2.15
3/1/2006	4/1/2006	Spectrus CT1300 - D00F (CR3) v2	2.3
4/1/2006	5/1/2006	Spectrus CT1300 - D00F (CR3) v2	2.35
5/1/2006	6/1/2006	Spectrus CT1300 - D00F (CR3) v2	2.25
6/1/2006	7/1/2006	Spectrus CT1300 - D00F (CR3) v2	2.25
7/1/2006	8/1/2006	Spectrus CT1300 - D00F (CR3) v2	2.2
8/1/2006	9/1/2006	Spectrus CT1300 - D00F (CR3) v2	2.25
9/1/2006	10/1/2006	Spectrus CT1300 - D00F (CR3) v2	2.25
10/1/2006	11/1/2006	Spectrus CT1300 - D00F (CR3) v2	2.3
11/1/2006	12/1/2006	Spectrus CT1300 - D00F (CR3) v2	2.25
12/1/2006	1/1/2007	Spectrus CT1300 - D00F (CR3) v2	2.25
1/1/2007	2/1/2007	Spectrus CT1300 - D00F (CR3) v2	2.25
2/1/2007	3/1/2007	Spectrus CT1300 - D00F (CR3) v2	2.3
3/1/2007	4/1/2007	Spectrus CT1300 - D00F (CR3) v2	2.3
4/1/2007	5/1/2007	Spectrus CT1300 - D00F (CR3) v2	2.2
5/1/2007	6/1/2007	Spectrus CT1300 - D00F (CR3) v2	2.3
6/1/2007	7/1/2007	Spectrus CT1300 - D00F (CR3) v2	2.35
7/1/2007	8/1/2007	Spectrus CT1300 - D00F (CR3) v2	2.35
8/1/2007	9/1/2007	Spectrus CT1300 - D00F (CR3) v2	2.3
9/1/2007	10/1/2007	Spectrus CT1300 - D00F (CR3) v2	2.3
10/1/2007	11/1/2007	Spectrus CT1300 - D00F (CR3) v2	2.25
11/1/2007	12/1/2007	Spectrus CT1300 - D00F (CR3) v2	2.2
12/1/2007	1/1/2008	Spectrus CT1300 - D00F (CR3) v2	2.2
1/1/2008	2/1/2008	Spectrus CT1300 - D00F (CR3) v2	2.15
2/1/2008	3/1/2008	Spectrus CT1300 - D00F (CR3) v2	2.25
3/1/2008	4/1/2008	Spectrus CT1300 - D00F (CR3) v2	2.3
4/1/2008	5/1/2008	Spectrus CT1300 - D00F (CR3) v2	2.25
5/1/2008	6/1/2008	Spectrus CT1300 - D00F (CR3) v2	2.25
6/1/2008	7/1/2008	Spectrus CT1300 - D00F (CR3) v2	2.3
7/1/2008	8/1/2008	Spectrus CT1300 - D00F (CR3) v2	2.3
8/1/2008	9/1/2008	Spectrus CT1300 - D00F (CR3) v2	NOD
9/1/2008	10/1/2008	Spectrus CT1300 - D00F (CR3) v2	2.15
10/1/2008	11/1/2008	Spectrus CT1300 - D00F (CR3) v2	2.2
11/1/2008	12/1/2008	Spectrus CT1300 - D00F (CR3) v2	2.3
12/1/2008	1/1/2009	Spectrus CT1300 - D00F (CR3) v2	2.4
1/1/2009	2/1/2009	Spectrus CT1300 - D00F (CR3) v2	1.92
2/1/2009	3/1/2009	Spectrus CT1300 - D00F (CR3) v2	MNR
3/1/2009	4/1/2009	Spectrus CT1300 - D00F (CR3) v2	1.9
4/1/2009	5/1/2009	Spectrus CT1300 - D00F (CR3) v2	2.05
5/1/2009	6/1/2009	Spectrus CT1300 - D00F (CR3) v2	1.8
6/1/2009	7/1/2009	Spectrus CT1300 - D00F (CR3) v2	1.85
7/1/2009	8/1/2009	Spectrus CT1300 - D00F (CR3) v2	1.34
8/1/2009	9/1/2009	Spectrus CT1300 - D00F (CR3) v2a	1.5

Attachment 7

- Request to Continue 316(a) Variance
- 316(b) Information

Progress Energy offers the following information regarding continuance of the 316(a) variance:

Crystal River Units 1, 2 and 3 requests a continuation of renewal of its 316(a) thermal variance in accordance with General Procedure 1 of the USEPA 316 Guidance for Permit Reissuance. Progress Energy offers the following basis for the continuance of the 316(a) variance:

1. The facility has adopted structural and operational controls to achieve significant reductions in thermal discharge:

Progress Energy (then dba Florida Power Corporation) completed 316(a) and (b) studies in 1985 (FPC, 1985), including an evaluation of seagrasses in the vicinity of the thermal discharge. The EPA and FDEP determined "substantial damage" had occurred in approximately 1100 acres of Crystal Bay due to thermal discharge from the CREC. As a result of these studies, a reduced thermal discharge maximum of 96.5 F three hour rolling average was established at the point of discharge (POD), coupled with the installation and operation of helper cooling towers. These operational changes resulted in a significant reduction in thermal discharge, allowing for the recolonization of seagrasses in the vicinity of the CREC discharge.

Biological studies were conducted for three years following implementation of the helper cooling towers (Mote 1993, 1994, 1995) to quantify seagrass presence and recovery within a two mile radius of the site POD. Results indicated a system of seagrass bed recruitment and expansion in submerged aquatic vegetation cover and condition over the three year monitoring period. Six new beds appeared in barren areas, and of these, three persisted in 1995. More than half of the intensely monitored beds had net increases in perimeter and 8 of 15 beds also increased with respect to cover from 1993 to 1994. Biomass was lower and productivity was higher in 1995 compared to 1994, possibly related to heavy storm patterns experienced in 1995. Overall, changes along transects and bed locations within the 2 mile zone of discharge were mirrored by changes at more distant sites, thus discounting thermal influence.

A Seagrass Technical Advisory Committee (TAC) was established in 1996 to review the seagrass monitoring reports and offer suggestions at the site. The TAC concluded that external influences not evaluated, such as turbidity, light intensity, and salinity variations may have more of an influence on seagrass colonization and distribution in the area than thermal effects (TAC Final Report, 1996).

A additional study was conducted in 2001 to re-survey several of the sites studied in 1993-1995 to compare results from the previous studies (Coastal Seas Consortium, 2002). Results indicated that *Halodule wrightii* had spread throughout Basin 1 and 2 (basins closest to the POD), indicating greater coverage than previously reported. Basin 1 had up to 50% coverage by large beds of dense *Halodule* within a mosaic of rocks, bars, and deep channels.

In November-December of 2007, a hydroacoustic seagrass quantification study (Remetrics, 2008) was implemented to evaluate the effectiveness of utilizing a hydroacoustic system to collect submerged plant cover and height information in the shallow water environment near the CREC. A copy of this report is included on the enclosed compact disk.

In addition, selected rake samples, underwater video, and SCUBA diver surveys were performed to validate hydroacoustic results. Results of the hydroacoustic survey showed lower average biocover than results obtained in 2001. The significant difference in sampling methodology, lack of efficacy of hydroacoustic surveys in very shallow areas, influence of external abiotic factors, as well as the demonstrated dynamic nature of seagrass beds in this coastal environment likely account for the differences noted.

Overall, seagrass monitoring studies have documented both the expansion and contraction of seagrass beds over time in the Crystal Bay region. Major external factors, such as turbidity, light intensity, and salinity changes, as well as severe storm events contribute significant influence on the colonization, distribution, and growth of seagrasses in the area. The implementation of helper cooling towers to maintain a thermal maximum of 96.5 F three hour rolling average at the point of discharge has significantly reduced the area of thermal impact from the discharge canal and removed the significant thermal influence on seagrass bed distribution over much of Crystal Bay. As such, the 316(a) thermal variance for Crystal River Units 1, 2 and 3 should be renewed.

2. Permit condition I.E.16 requires the submittal of a thermal plan of study (POS) to determine any effects on biological communities from the heated water discharge to Crystal Bay. A draft biological thermal POS was subsequently submitted to the Department on September 17, 2007. A copy of the draft POS and transmittal correspondence is provided on the enclosed CD. To date we have not heard back from the Department relative to their review of the plan.
3. There are no immediate planned changes to Crystal River Units 1 and 2 that will significantly change the plant operating conditions or load factors during the duration of the reissued permit.
4. Crystal River Unit 3 is proceeding with a planned power uprate that will result in an increase in thermal output by approximately 13.2 % relative to the current baseline heat rejection rate for this unit (7 % increase when all 3 units are considered). However, this additional heat will be mitigated by the new Helper Cooling Tower South (HCTS) designed to remove the increased rejected heat anticipated by the Unit 3 uprate project as well as heat currently being removed by the Aggreko modular cooling towers (see NPDES permit modification request submitted September 2009).

Current plans are for the new Levy County Nuclear Plant (LNP) cooling tower blowdown to discharge into to the Crystal River Units 1, 2 & 3 discharge canal. However, the LNP discharge will not occur until year 2019, and, therefore, will not impact the existing Unit 1, 2, & 3 discharge canal temperatures during the life of the reissued NPDES permit.

316(b) Information

In accordance with Section 316(b) of the Clean Water Act and Rule 62-620.100(3)(z) F.A.C., compliance with the rules relative to cooling water intake structures are determined on a case-by-case best professional judgement (BPJ) basis.

No changes to the intake structure or circulating water flow rates have taken place over the life of the current permit, nor are any changes anticipated during the life of the reissued permit.

Attached, please find results of an impingement study dated March 3, 2008. Please note that this study was not finalized due to the 2nd Circuit Court decision to remand several portions of the 316(b) rules, which resulted in suspension of the entire rule.

Attachment 7 - Supplemental

Crystal River South POD Temperature Model Description

POD Temperature mandated load reductions historically occur during the hottest part of the day when system load demand is at its peak. Excessive load reductions during this time strain system resources to meet demands and limit our ability to sell excess generation, often at premium prices, and instead require us to purchase power. Following load reductions, when conditions permit, it is essential to increase unit load slowly to prevent exceeding POD Temperature limitations. Frequently, by the time unit load has been increased to its POD Temperature mandated limit the system peak has passed and the need for maximum generation diminished. The POD Temperature Calculator is a tool designed to address these issues.

The POD Temperature Calculator is a mathematical model utilizing various thermodynamic and mass flow algorithms to calculate POD Instantaneous Temperatures. Using inputs from Crystal River Units 1 – 5 the model automatically and dynamically calculates the temperature under varying operating conditions. Data for the model is harvested from the Crystal River PI data collection system. Rather than utilizing predicted performance values of the various components, the model gathers and utilizes real-time data to calculate the POD Temperature.

The model provides operators a 1½ to 2 hour advance indication of expected POD Instantaneous Temperature. By providing this advance notice, operators are able to make smaller, proactive incremental changes in each unit's output. In the past, to avoid violating our 3-hour POD Average Temperature of 96.5° we have been, at times, required to make radical and often excessive load reductions in order to reduce POD Instantaneous Temperature sufficiently.

The operator has the ability to enter a POD Instantaneous Temperature setpoint. Based on this setpoint model provides a Plant Discharge Temperature that, based on current model projections, will provide the desired POD Instantaneous Temperature. To alert operators when operational limits are approaching or exceeded, the model provides visual cues in the form of changing colors. When launched, the model starts automatically and continually updates the data and recalculates expected POD Instantaneous Temperature every 5 minutes. The model can be manually updated, if desired.

To assist in accurately managing load reductions, the model harvests real-time condenser performance data to assess which unit is contributing the most heat to the discharge canal. Based on this information and real-time data, the model provides a recommended megawatt reduction and target megawatt output on that unit to obtain the desired Instantaneous POD Temperature. By identifying the unit heating the discharge canal the most, load reductions are optimized and the overall load reductions smaller thereby maximizing overall plant output and minimizing system impact at a time when load is most critical.

The most recent enhancement to the POD Temperature Model was inclusion of the newly installed Modular Cooling Towers into the thermodynamic and mass flow algorithms. Refinements to the POD Temperature model are ongoing to ensure the Modular Cooling Towers are accurately accounted for in the model.

In the future, after the model has been refined and proven, it would be a likely candidate for installation on EtaPro.

Future enhancements will provide the operator with target POD Instantaneous Temperatures, Plant Discharge Temperatures and Target Megawatt output to lower the 3-hour Average POD Temperature in the event the POD Instantaneous Temperature has remained above the operator-designated setpoint for a prolonged period.

Even with the limitations noted at maximum plant capacity the model has been capable of calculating POD Instantaneous Temperatures to within tenths of a degree from the measured POD Instantaneous Temperature.

Attachment 8

Chemical Usage & Discharge Information

Attachment 8

Chemical Usage/Discharge

Below are descriptions of chemicals used at CR123 that have the potential to be discharged via one of the NPDES-permitted outfalls. Material Safety Data Sheets (MSDSs) are attached. These chemicals are also described somewhat in attachments 4 and 6.

D-013

As stated in attachment 4, Unit 3 has the ability to inject oxidizing biocides to control biofouling. In addition to sodium hypochlorite, various sodium bromide products (or a mixture of sodium hypochlorite and sodium bromide) may be used. In order to comply with the TRO limit, a dechlorination/debromination product, such as sodium bisulfite or sodium metabisulfite would be used.

D-00F

Chemical use for the Nuclear Services and Decay Heat Seawater System (also known as the Raw Water or RW system), currently involves use of the molluscicide, Spectrus CT1300 (also generically referred to as "Clamtrol"), manufactured by GE Betz. Target concentrations during treatment are maintained at ≤ 2.5 mg/L. Additionally, as described in attachment 6, we request that this system be permitted to inject oxidizing biocides, similar to those currently permitted for D-013. These would also involve the use of sodium hypochlorite and/or sodium bromide products as well as the use of dechlorination/debromination chemicals, such as sodium bisulfite or sodium metabisulfite, added at a stoichiometric ratio to ensure compliance with a TRO limit.

Secondary-Side Chemical Usage

The secondary side steam cycle (non-radioactive cycle), of a pressurized water reactor (PWR) requires the use of several chemicals pursuant to Institute of Nuclear Power Operations (INPO) guidelines. The first is hydrazine, which is used as an oxygen scavenger to inhibit corrosion. Typical concentrations of hydrazine in the secondary side are maintained at 90-100 $\mu\text{g/L}$ (ppb). During startup and shutdown, these concentrations are increased to 1-2 ppm for short periods of time. During refueling outages, that occur once every two years, wet lay-up solution is added to the steam generators. Concentrations of hydrazine in wet lay-up solution are approximately 100 ppm.

Secondary-Side Chemical Usage (cont.)

Morpholine is also used in the secondary side. During normal operation, concentrations of morpholine are maintained at approximately 45 ppm. During outages, these concentrations are increased in the wet lay-up solution to 100 ppm.

Both hydroquinone and ammonia are intermediate by-products of the breakdown of hydrazine caused by heat and typically are around 75 ppb for hydroquinone and around 0.5 ppm for ammonia.

During normal operation, some secondary side discharge occurs through the CD system at 0.01 mgd to a into the RW system (D-00F), which discharges at a minimum flow of 34.5 mgd, providing a dilution factor of 0.0003. Therefore, discharge concentrations of hydrazine through the D-00F outfall during normal operation would be approximately 0.00003 mg/L (0.03 ppb), while morpholine would be around 0.0135 ppm. Applying the same dilution ratio to the by-products hydroquinone and ammonia yields a final discharge concentration in the D-00F discharge of 0.0000225 ppm for hydroquinone and 0.00045 ppm of ammonia.

Due to the higher concentrations of hydrazine and morpholine in the wet lay-up solution, the typical flow path for discharging lay-up solution is to direct this CD system wastewater to the turbine building sump and then to the on-site IWW percolation ponds at a maximum flow rate of 0.03 mgd. However, there is an alternate flowpath of the wet lay-up solution from the CD system at a maximum flow rate of 0.06 mgd into the D-00F discharge, which, again, has a minimum flow rate of 34.5 mgd. Applying a dilution factor of 0.0017 (0.06 mgd max flow rate of CD system discharge divided by minimum flow rate of 34.5 mgd of D-00F discharge) results in final discharge concentration out of the D-00F outfall of: hydrazine = 0.17 ppm; morpholine = 0.17 ppm; hydroquinone = 0.13 ppm; and ammonia = 0.0025 ppm.

Reactor Cavity Cleaning Activities

During outages, the reactor cavity undergoes cleaning and decontamination. Two chemicals are used for this activity, which are Neutral Multi-Use Cleaner and Crud Remover. The first uses hydrogen peroxide as the active ingredient, while the second is a sodium hydroxide-based product. A majority of this product is collected and disposed off-site. However, a small portion contained in rinse water has the ability to be sent through the ECST system (radwaste treatment system). The ECSTs, in turn discharge at 0.016 mgd through outfall D-00F (43.5 mgd) providing a dilution ration of 0.00037. Given the small amount of this product that makes up the ECST discharge, the final discharge concentrations are expected to be virtually unmeasurable.

Instrument Air Heat Exchangers

CR3 utilizes closed-cycle mechanical draft evaporative cooling towers. These include the Instrument Air Heat Exchangers (IAHE) 6B and 6C. These cooling towers are part of a heat exchange system that cools various instrument air compressors at CR3. The water source for these towers is treated groundwater (service water).

Currently, the station uses a phosphate-based antiscalant, Dianodic 2142 (D-2142), to control scaling and corrosion. Concentrations of D-2142 are maintained in the IAHE 6A/6B at 10-50 ppm. Typically, the IAHE towers discharge to the SDT-1 system at 1-5 gpm, each (only one tower is in service and, therefore only 1 of the 2 towers discharges to the SDT-1 at any one time). The SDT-1 tank has a volume of 100,000 gallons, and only one SDT-1 tank release occurs during a day, resulting in a dilution factor of 0.0072 ($5 \text{ gpm} \times 1440 \text{ minutes} = 7200 \text{ gallons}$; $7200 \text{ gallons} / 100,000 \text{ gallons SDT-1 tank volume} = 0.0072$). Applying the maximum concentration of 50 ppm would result in a worst-case SDT-1 discharge concentration of 0.36 ppm into D-00F.

The SDT-1 tank releases are discharged at 0.8 mgd into the D-00F discharge flowing at 43.5 mgd, providing an additional dilution factor of 0.0184 ($0.8 / 43.5 = 0.0184$). Applying this dilution factor to the SDT-1 discharge concentration of 0.36 ppm results in a worst-case D-00F discharge concentration of 0.0066 ppm (or 6.6 ppb).

In addition to D-2142, the IAHE system also utilizes Spectrus NX1103, Spectrus NX1100 and Foamtrol AF1440, which were previously-permitted. NX1103 and NX1100 are used at different times for approximately 6 months out of the year. When used, concentrations of each within the towers are around 50 ppm. The AF1440 is only used when foaming is a problem. It has actually not been used for several years. Applying the same dilution factors above results in final worst-case D-00F discharge concentrations of 0.0066 ppm each for both Spectrus NX1103 and NX1100.

Finally, as a result of a change in service water treatment a couple of years ago from a lime softening to a microfiltration system, the IAHE cooling towers have experienced an increase in calcium scaling. In order to control this calcium scaling, CR3 is considering replacing the 4 chemicals listed above (D-2142, Spectrus NX1103, Spectrus NX1100 and Foamtrol AF1440) with two other chemicals. These two products, both supplied by GE Betz, are Spectrus OX903 and Continuum AT901 (MSDSs attached). Concentrations of Spectrus OX903 are expected to be maintained at 5 ppm within the towers, while concentrations of Continuum AT901 are expected to be 30 ppm. Once again applying the same dilution factors above for releases to D-00F via the SDT-1 tank would result in worst-case discharge concentrations of 0.0007 ppm for Spectrus OX903 and 0.004 ppm for Continuum AT901.

Antifouling Coatings

Over the life of the current NPDES permit, Progress Energy has obtained several authorizations relative to the use of the copper-based anti-fouling coating Ameron ABC#3. Monitoring data previously submitted to the Department to evaluate the release of copper have shown no exceedences to the Class III marine water quality standard for copper. This finding was subsequently acknowledged by the Department in a letter dated June 4, 2002.

Based on these previous conclusions and the fact that the Department has historically authorized use of this product, we request that intermittent use of the product be allowed. Current usage involves re-coating the CR3 condenser inlet water boxes, pump suction housings, and inlet screen sensing tubes approximately once every two years or when a system is replaced.

In addition to use of this product at CR3, we request that the same systems at CR 1&2, i.e. the inlet/outlet water boxes, circulating and screen wash pump suction housings, and packing drains on the circulating water screen wash pumps, also be allowed to utilize Ameron ABC#3 as a part of routine maintenance activity.

As with all applications involving this product, the product will be applied per manufacturer's instructions and allowed to completely cure before the system is placed back into operation.

Material Safety Data Sheets

For chemicals used and have the potential to be discharged via one of the NPDES-permitted outfalls.

- Sodium Hypochlorite
- Sodium Bromide
- Actibrom (sodium bromide with surfactant added)
- Sodium Bisulfite
- Sodium Metabisulfite
- Hydrazine (Cortrol OS5010)
- Morpholine
- Spectrus CT1300 (Clamtrol)
- Spectrus NX1103
- Spectrus NX1100
- Foamtrol AF1440
- Dianodic 2142
- Spectrus OX903
- Continuum AT901
- Neutral Multi-Use Cleaner
- Crud Remover
- Hydrochloric Acid
- Sulfuric Acid
- Sodium Hydroxide
- Ameron ABC#3



ODYSSEY
MANUFACTURING CO.

MATERIAL SAFETY DATA SHEET

REVISED 7/2/00

SECTION I CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

ODYSSEY MANUFACTURING CO.
1484 Massaro Boulevard
Tampa, Florida 33619
1-813-635-0339

EMERGENCY RESPONSE NUMBER:
1-800-ODYSSEY (FLORIDA)
1-813-635-0339 (24 hours)

SUBSTANCE: SODIUM HYPOCHLORITE

TRADE NAME: Ultra-CHLOR

CHEMICAL NAME/SYNONYMS: Sodium Hypochlorite Solution, Bleach Solution, Bleach Liquor, Hypo-solution, Bleach, and Liquid Bleach.

CAS NUMBER: 7681-52-9

CHEMICAL FAMILY: Alkali

FORMULA: NaOCl

DOT PROPER SHIPPING NAME: Hypochlorite Solution

DOT HAZARD CLASS: 8 (Corrosive) PG III; PG II (For solutions greater than 16% available chlorine)

DOT IDENTIFICATION NO: UN1791

RQ: 100 pounds

DOT EMERGENCY GUIDE NO: 154

SECTION II COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENT(S):

Sodium Hypochlorite (NaOCl)	10.0 - 20.0% wt
Sodium Hydroxide (NaOH)	0.1 - 0.4% wt
Water (H ₂ O)	79.7 - 89.9% wt

SECTION III HAZARDS IDENTIFICATION

NFPA CLASSIFICATION (SCALE 0-4): Health=2 Fire=0 Reactivity=1

EC CLASSIFICATION (ASSIGNED): C (Corrosive)

EMERGENCY OVERVIEW

COLOR: Yellow

PHYSICAL FORM: Liquid

ODOR: Chlorine Odor

MAJOR HEALTH HAZARDS: Respiratory Tract Burns, Skin Burns, Mucous Membrane Burns, and Eye Irritation

HAZARDOUS MIXTURES WITH OTHER LIQUIDS, SOLIDS, OR GASES: Reacts violently with acids liberating chlorine gas. Also reacts with organic substance. When heated, gives off oxygen that may increase fire hazard.

POTENTIAL HEALTH EFFECTS

INHALATION:

- **SHORT TERM EXPOSURE:** Irritation to respiratory tract. May have same as effects reported in other routes of exposure, burns, blisters, nausea, difficulty breathing, and lung congestion.
- **LONG TERM EXPOSURE:** Same as effects reported in short term exposure.

SKIN CONTACT:

- **SHORT TERM EXPOSURE:** Irritant, reddening of the skin. May have burns, blisters, and itching
- **LONG TERM EXPOSURE:** Same as effects reported in short term exposure.

EYE CONTACT:

- **SHORT TERM EXPOSURE:** Irritation (possibly severe), possible eye damage
- **LONG TERM EXPOSURE:** Same as effects reported in short term exposure.

INGESTION:

- **SHORT TERM EXPOSURE:** Burns, vomiting stomach pain, disorientation, bluish skin color, convulsions, coma
- **LONG TERM EXPOSURE:** Same as effects reported in short term exposure.

CARCINOGEN STATUS

OSHA: N

NTP: N

IARC: N

SECTION IV FIRST AID MEASURES

INHALATION: Remove from exposure and get fresh air. Use a bag valve mask or similar device to perform artificial respiration (rescue breathing) if needed. Keep warm and at rest. Get medical attention immediately if artificial respiration is required.

SKIN CONTACT: Remove contaminated clothing, jewelry, and shoes immediately. Flush affected area with large amounts of water, preferably a safety shower. Use soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minutes). For burns, cover affected area securely with sterile, dry, loose fitting dressing. If skin is burned, get medical attention immediately.

EYE CONTACT: Wash eyes immediately with large amounts of water, occasionally lifting upper and lower lids, until no evidence of chemical remains (at least 15 minutes). Continue irrigating with a normal saline solution until ready to transport to physician. Cover with sterile bandages. Get medical attention immediately.

INGESTION: Rinse mouth with water. Drink large quantities of milk (water if no milk is available). Milk of magnesia may be helpful. **DO NOT USE ACIDIC ANTIDOTES SUCH AS SODIUM BICARBONATE.** When vomiting occurs, keep head lower than hips to help prevent aspiration. If person is unconscious, do not induce vomiting and turn their head to the side. Never make an unconscious person vomit or drink fluids. Get medical attention.

NOTE TO PHYSICIAN: For inhalation, consider oxygen. For ingestion, avoid gastric lavage, emesis, sodium bicarbonate and acid solutions. Consider the use of antacids.

SECTION V FIRE FIGHTING MEASURES

FLASH POINT: Non-flammable

FLAMMABLE LIMITS: Non-flammable

FIRE AND EXPLOSION HAZARDS: Negligible fire hazard. Oxidizer. This material will react with some metals and cause liberation of oxygen. May ignite or explode on contact with combustible materials. Toxic fumes can be liberated by contact with acid or heat.

EXTINGUISHING MEDIA: Regular dry chemical, carbon dioxide, water, or foam suitable for surrounding fire. For large fires, use regular foam or flood with fine water spray.

FIRE FIGHTING: Wear self-contained breathing apparatus and full protective clothing. Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. Use extinguishing agents appropriate for surrounding fire. Do not get water directly on material. For large fires, flood with fine water spray. Reduce vapors with water spray. Apply water from a protected location or from a safe distance. Avoid body contact or inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

SECTION VI ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE: Do not touch spilled material. Stop leak if possible without personal risk. For small spills, collect spilled material in appropriate container for disposal and consider absorbing with sand or other non-combustible material (e.g., do not use sawdust or other combustible material). Be advised, however, that the use of absorbing material is creating hazardous waste and this absorbing material must now be disposed of properly. Collect spilled material in appropriate container for disposal. For small dry spills, move containers away from spill to a safe area. For large spills, dike for later disposal. If possible, do not allow material to enter sewers, streams, ponds or storm conduits as concentrated solutions will seriously injure aquatic life. Keep unnecessary people away, isolate hazard area and deny entry. Contain in as small an area as possible, such as a holding area for dilution and neutralization. Contain spill in plastic drums when available. Dispose of in accordance with Federal, State, and local regulations. Personnel engaged in cleanup operations must be equipped with NIOSH approved respirator protection, rubber boots, gloves, and clothing to avoid body contact. Reportable Quantity (RQ): 100 pounds. Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800) 424-8802 (USA) or (202) 426-2675 (USA).

ADVANCE PLANNING: Plan in advance for an occupational release and have necessary equipment and neutralization agents on-site. Contact Odyssey Manufacturing for assistance.

SECTION VII HANDLING AND STORAGE

Store in vented, closed containers that provide protection from direct sunlight. Keep separated from incompatible substances and do not store near acids, heat, or oxidizable materials or organics. When handling, do not mix with other cleaning agents that may liberate chlorine gas vapors (e.g., acidic agents).

Store and handle in accordance with all current regulations and standards including NFPA 430 Code for the Storage of Liquid and Oxidizing Materials.

SECTION VIII EXPOSURE CONTROLS AND PERSONNEL PROTECTION

EXPOSURE LIMITS: 2 mg/m³ AIHA recommended STEL 15 minute(s) for Sodium Hypochlorite

VENTILATION: Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Splash goggles are preferred to a faceshield. Another option is to wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: It is recommended to wear appropriate chemical resistant clothing to avoid body contact such as a rubber apron or rain suit. Boots are preferred for footwear.

GLOVES: Wear appropriate chemical resistant gloves.

RESPIRATOR: Under conditions of frequent use or heavy exposure, respiratory protection may be needed.

Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.

- Any chemical cartridge respirator with organic vapor cartridge(s).
- Any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s)
- Any air-purifying respirator with a full facepiece and an organic vapor canister
- Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply (Use for Unknown Concentrations or those that may be Immediately Dangerous to Life or Health)
- Any self-contained breathing apparatus with a full facepiece (Use for High Concentrations or those which are immediately Dangerous to Life or Health)

SECTION IX PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL APPEARANCE: Liquid

APPEARANCE AND ODOR: Clear - Chlorine odor like household bleach.

COLOR: Greenish - Yellowish cast

MOLECULAR WEIGHT: 74.44

MOLECULAR FORMULA: Na-O-Cl

BOILING POINT: Degrades at 230 Degrees Fahrenheit
FREEZING POINT: 7 Degrees Fahrenheit
SPECIFIC GRAVITY: 1.15 - 1.17 at 60 Degrees Fahrenheit
PH: Approximately 11 - 13
VAPOR PRESSURE (mm HG): Vapor Pressure of water + decomposition product Vapor Pressure
VAPOR DENSITY: Not Available
SOLUBILITY IN WATER: Complete
VOLATILITY: Not Available
EVAPORATION RATE: >1
COEFFICIENT OF WATER /OIL DISTRIBUTION: Not Available

SECTION X STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressure.
CONDITIONS TO AVOID: Avoid heat, flames, sparks and other sources of ignition. Dangerous gases may accumulate in confined spaces. May ignite or explode on contact with combustible materials.
INCOMPATIBLES: Acids, metals, amines, combustible materials, reducing agents. Specific reactions with sodium hypochlorite include the following:
ACIDS: Violent reaction.
ALUMINUM: Corrosive action.
AMINES: Form explosive chloramines.
AMMONIA: Form explosive chloramines.
AMMONIUM SALTS: May form explosive product.
BENZYL CYANIDE (ACIDIFIED): Explosive reaction.
CELLOULOSE: Violent reaction
ETHYLENEIMINE: Forms explosive 1-chloroethyleneimine.
FORMIC ACID: Explosive mixture.
METHANOL: May form explosive compound.
NITROGEN COMPOUNDS: Forms explosive N-chloro compounds.
ORGANIC AND COMBUSTIBLE MATERIALS: Fire and explosion hazard.
OXALIC ACID: Intense reaction
REDUCING AGENTS: Fire and explosion hazard
ZINC: Corrosive
HAZARDOUS DECOMPOSITION:
Thermal decomposition products – Chlorine and Hydrochloric Acid Vapors
Decomposition Products – Hypochlorous Acid Vapors
POLYMERIZATION: Will not polymerize.

SECTION XI SODIUM HYPOCHLORITE TOXICOLOGICAL INFORMATION

IRRITATION DATA: 10 mg eyes – rabbit moderate
TOXICITY DATA:
1gm/ kg oral-woman; TDLo; 45mg/kg intravenous-man TDLo; 5800 mg/ kg oral-mouse LD50; 140 mg/ kg/9 week(s) continuous oral-rat TDLo
CARCINOGEN STATUS: According to the IARC, animal inadequate evidence, human no adequate data, Group 3 (Hypochlorite salts)
LOCAL EFFECTS:
Corrosive: inhalation, skin contact, eye, ingestion hazards
ACUTE TOXICITY LEVEL:
Slightly Toxic if ingested
MUTAGENIC DATA:
Mutation in micro organisms – Salmonella typhimurium 1mg / plate (-S9); DNA repair – Escherichiacoli 20ug/ disc; DNA damage – Escherichiacoli 420 umol/L; phage inhibition capacity – Escherichiacoli 103 ug/ well; micronucleus test - non-mammalian species multiple 200 ppb; cytogenetic analysis - non-mammalian species multiple 120 ug/ L; cytogenetic analysis – human lymphocyte 100 ppm 24hour(s); sister chromatid exchange – human embryo 149 mg/ L; cytogenetic analysis – hamster lung 100 mg/ L
HEALTH EFFECTS:

INHALATION

ACUTE EXPOSURE: May cause severe bronchial irritation, sore throat with possible blistering, coughing,

stomatitis, nausea, labored breathing, shortness of breath and pulmonary edema. 10-20 mg/m³ causes burning of the nose and throat; 40-60 mg/m³ may be fatal. If sufficient amounts are absorbed, may cause effects as detailed in acute ingestion.

CHRONIC EXPOSURE: No data available.

SKIN CONTACT

ACUTE EXPOSURE: Extent of damage depends on concentration, pH, volume of solution and duration of contact. May cause redness, pain, blistering, itchy eczema and chemical burns. Sensitization reactions are possible in previously exposed persons.

CHRONIC EXPOSURE: Effects depend on concentration and duration of exposure. Repeated or prolonged contact with corrosive substances may result in dermatitis or effects similar to acute exposure. Allergic dermatitis has also been reported.

EYE CONTACT

ACUTE EXPOSURE: May cause redness, pain, and blurred vision. Solutions of 5% splashed in human eyes have caused a burning sensation and later only slight superficial disturbance of the corneal epithelium which cleared completely in the next day or two without special treatment. However, one animal study reports a 5% solution causing only moderate irritation with clearing within 7 days. A higher concentration of 15% tested on rabbit eyes caused immediate severe pain, hemorrhages, rapid onset of ground-glass appearance of the corneal epithelium, moderate bluish edema of the whole cornea, chemosis and discharge for several days. Such eyes have sometimes healed in 2-3 weeks with slight or no residual corneal damage but they had neovascularization of the conjunctiva and distortion of the nictitating membrane by scarring.

CHRONIC EXPOSURE: Depending on concentration and duration of exposure, symptoms may be as those of acute exposure.

INGESTION

ACUTE EXPOSURE: May cause irritation and erosion of the mucous membranes, vomiting (possibly bloody) and abdominal pain and spasms. A drop in blood pressure, shallow respiration, edema (possibly severe) of pharynx, larynx, and glottis, confusion, convulsions, delirium and coma may occur. Cyanosis and circulatory collapse are possible. Esophageal or gastric perforation and strictures are rare. Death may occur, usually due to complications of severe local injury such as toxemia, shock, perforations, hemorrhage, infection and obstruction. Massive ingestions may produce fatal hyperchloremic metabolic acidosis or aspiration pneumonia.

CHRONIC EXPOSURE: Sensitization reactions are reported in individuals who are exposed in small amounts through their water supply. High doses have caused sperm abnormality in mice.

SECTION XII ECOLOGICAL INFORMATION

ECOTOXICITY DATA:

FISH TOXICITY: 94.0 ug/L 96h hour(s) LC50 (Mortality) Cutthroat trout

(*Oncorhynchus clarki*)

INVERTEBRATE TOXICITY: 31.6 ug/L 7 hour(s) LC50 (Species Diversity) Protozoan phylum (Protozoa)

ALGAL TOXICITY: 90 ug/L 96 hour(s) LC50 (Mortality) Algae, phytoplankton, algal mat (Algae)

PHYTOTOXICITY: 230 ug/L 35 hour(s) (Biomass) Curled pondweed (*Potamogeton crispus*)

OTHER TOXICITY: 2.1 ug/L 28 day(s) (Chlorophyll) Aquatic community (Aquatic community)

ENVIRONMENTAL SUMMARY: Highly toxic to aquatic life.

SECTION XIII DISPOSAL CONSIDERATIONS

Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001. Dispose in accordance with all applicable regulations.

SECTION XIV TRANSPORT INFORMATION

U.S. DOT 49 CFR 172.101 SHIPPING NAME-UN NUMBER: Sodium Hypochlorite) - UN1791

U.S. DOT 49 CFR 172.101 HAZARD CLASS OR DIVISION: 8

U.S. DOT 49 CFR 172.101 PACKING GROUP: III (less than 16% available chlorine) / II (16% or more available chlorine)

U.S. DOT 49 CFR 172.101 AND SUBPART E LABELING REQUIREMENTS: Corrosive

U.S. DOT 49 CFR 172.101 PACKAGING AUTHORIZATIONS:

EXCEPTIONS: 49 CFR 173.154

NON- BULK PACKAGING: 49 CFR 173.203 (less than 16% available chlorine) / 49 CFR 173.202 (16% or more available chlorine)

BULK PACKAGING: 49 CFR 173.241 (less than 16% available chlorine) / : 49 CFR 173.242 (16% or more available chlorine)

U.S. DOT 49 CFR 172.101 QUANTITY LIMITATIONS:

PASSENGER AIRCRAFT OR RAILCAR: 5 LITERS / (less than 16% available chlorine) / 1 LITERS (16% or more available chlorine)

CARGO AIRCRAFT ONLY: 60 LITERS / (less than 16% available chlorine) / 30 LITERS (16% or more available chlorine)

SECTION XV REGULATORY INFORMATION

U.S. REGULATIONS

TSCA INVENTORY STATUS: Y

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

CERCLA SECTION 103 (40CFR302.4): Y

SODIUM HYPOCHLORITE: 100 LBS RQ

SARA SECTION 302 (40CFR355.30) : N

SARA SECTION 304 (40CFR355.40) : N

SARA SECTION 313 (40CFR372.65) : N

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):

ACUTE: Y

CHRONIC: N

FIRE: N

REACTIVE: N

SUDDEN RELEASE: N

OSHA PROCESS SAFETY (29CFR1910.119): N

STATE REGULATIONS:

California Proposition 65: N EUROPEAN REGULATIONS:

EC NUMBER (BINECS) : 231-668-3

EC RISK AND SAFETY PHRASES:

R 31 Contact with acids liberates toxic gas.

R 34 Causes burns.

S ½ Keep locked-up and out of reach of children.

S 28b After contact with skin, wash immediately with plenty of soap and water.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

S 50 Do not mix with incompatible materials.

CONCENTRATION LIMITS:

C>10%	C	R 31-34
5%<=C<=10%	Xi	R 31-36/38

GERMAN REGULATIONS:

WATER HAZARD CLASS (WGK) : 2 (Official German Classification)

SECTION XVI OTHER INFORMATION

For additional information, contact our technical service department.

Information contained in this MSDS refers only to the specific material designated and does not relate to any process or use involving other materials. This information is based on data believed to be reliable, and the Product is intended to be used in a manner that is customary and reasonably foreseeable. Since actual use and handling are beyond our control, no warranty, express or implied, is made and no liability is assumed by Odyssey Manufacturing in connection with the use of this information.

APPLIED SPECIALTIES, INC.
33555 PIN OAK PARKWAY
AVON LAKE, OHIO 44012

AS-740

07254740-1
September 11, 2007
TELEPHONE (440) 933-9442
EMERGENCY: (216) 973-6118

MATERIAL SAFETY DATA

SECTION 1 MATERIAL IDENTIFICATION

PRODUCT NAME OR SYNONYMS AS-740
Sodium Bromide Biocide EPA # 5185-451-46982

SECTION 2 INGREDIENTS AND HAZARDS

COMPONENT	CAS. NUMBER	%	TWA/CEILING	REFERENCE
Sodium Bromide	7647-15-6	40%	Not Established	

Emergency Overview: Odorless, Colorless Liquid. CAUTION: May Be Harmful If Swallowed. May Cause Skin, And Eye Irritation With Redness And Swelling. Do Not Get In Eyes, On Skin Or On Clothing. Wash With Soap And Water After Handling. Remove Contaminated Clothing And Wash Before Use. Keep Container Tightly Closed. Use Only With Adequate Ventilation.

SECTION 3 REGULATORY INFORMATION

OSHA STATUS This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard

TSCA STATUS This substance is subject to regulation under FIFRA and is therefore exempt US Toxic Substance Control Act Inventory listing requirements.

CERCLA REPORTABLE QUANTITY None listed

SARA TITLE III:

SECTION 302 (EXTREMELY HAZARDOUS SUBSTANCE) Not listed

SECTION 311/312 (HAZARDOUS SUBSTANCES)

Classification Under Section 311/312 of SARA (40 CFR 370): Acute (Y) Chronic (Y) Fire (N) Reactive (N) Pressure (N)

SECTION 313 SUPPLIER NOTIFICATION: None listed

RCRA STATUS Not regulated as supplied

OSHA, ACGIH, NTP & IARC STATUS None listed

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS)

HEALTH - 1 FIRE - 0 REACTIVITY - 0

0 MINIMAL
1 SLIGHT HAZARD
2 MODERATE HAZARD
3 SERIOUS HAZARD
4 SEVERE HAZARD

Chemical identity of some ingredients may be withheld as confidential as permitted by 29 CFR 1910.1200 and various State right to know laws.

APPLIED SPECIALTIES, INC.
33555 PIN OAK PARKWAY
AVON LAKE, OHIO 44012

AS-740

07254740-1
September 11, 2007
TELEPHONE (440) 933-9442
EMERGENCY: (216) 973-6118

SECTION 4 HEALTH HAZARD AND PROTECTION DATA

TARGET ORGANS

Eyes Skin Respiratory System

ROUTES OF ENTRY INTO BODY

Skin or Eye Contact, Inhalation, Ingestion

SIGNS AND SYMPTOMS OF EXPOSURE:

Moderate eye irritant. May cause tearing with redness, and pain. Prolonged and excessive inhalation or ingestion may cause rashes, central nervous system depression and emaciation and, in severe cases, psychoses and mental deterioration; severity depends on concentration and duration of contact. May cause respiratory irritation. Overdose may cause gastrointestinal or cardiovascular irregularities. Sodium Bromide has been shown to cause embryo-fetal toxicity and malformations in rats at dose levels that also produce maternal toxicity. The No-Observed Effect Level is 100 mg/kg/day, and the Acceptable Daily Intake for sodium bromide from food and drinking water in humans is 1 mg/kg/day. Comparable high doses of sodium chloride (table salt) similarly cause malformation, embryo-fetal toxicity and maternal toxicity in mice.

TOXICOLOGICAL INFORMATION

Acute: Dermal LD50: >20000mg/kg (Rabbits) Oral LD50: >5000mg/kg (Rats)

Eye: May Cause Irritation Skin: Not expected to be irritating to the skin.

Reproductive Effects: A 3 generation Study in rats fed 4800 mg/kg showed a decrease in fertility; no effects were observed at lower levels according to the literature.

PROTECTIVE EQUIPMENT REQUIRED:

Employees should be required to use impervious clothing, rubber gloves, over boots, safety glasses with side shields as a minimum and other appropriate protective clothing to prevent skin contact. Employees shall be required to use splash-proof safety goggles (ANSI Z87.1 or equivalent) where the material may contact the eyes in addition to face shield. Clothing wet with product should be placed in a closed container until provisions are made for it to be discarded or laundered. Any clothing that becomes wet with the material should be removed immediately and not re-worn until the clothing has been properly cleaned. The employer should provide an eye wash fountain and quick drench shower within the immediate work area for emergency use. **RESPIRATORY:** Use only in well ventilated areas. Where the potential for excessive exposures exists which cannot be controlled by mechanical means, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations. **ESCAPE & FIRE FIGHTING:** Use self-contained breathing apparatus (pressure demand MSHA/NIOSH approved or equivalent) and full protective gear.

FIRST AID

SKIN CONTACT: Wash affected skin thoroughly with mild soap and plenty of water. Remove and wash contaminated clothing thoroughly before re-use. **Get medical attention immediately for any sign of irritation.**

EYE CONTACT: If material gets into the eyes, flush the eyes immediately with large amounts of water for at least 30 minutes, lifting the lower and upper lids occasionally. **Get MEDICAL attention immediately.** Contact lenses should not be worn when working with this substance or any other chemicals.

INHALATION: Remove to fresh air. Keep person quiet and warm. If person is not breathing call 911 then give artificial respiration and **Get medical attention immediately.** Treat symptomatically and supportively.

INGESTION: Never give anything by mouth to an unconscious person. Treat symptomatically and supportively. **Get medical attention immediately &** Contact poison control center. If vomiting occurs, keep head lower than hips to prevent aspiration. Do not induce vomiting unless told to do so by poison control or a medical doctor. Have person sip a glass of water if alert and able to swallow.

NOTE TO PHYSICIAN: Treat symptomatically and supportively. The following antidote for Bromide poisoning has been recommended. The decision to administer any antidote should be made only by qualified medical personnel. Give Sodium Bromide, 1 gram every hour in water or as salt tablets; for severe involvement give normal saline, 1 liter every 8 hours to a maximum of 2 liters per day. Sodium chloride therapy must be continued until the blood bromide level drops below 50mg/dL. Simultaneous administration of diuretics is also useful. (Driesback, Handbook of Poisoning, 12th Ed.)

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SECTION 5 PHYSICAL DESCRIPTION

APPEARANCE AND ODOR	Colorless clear liquid; odorless.
BOILING POINT	103 C (217F) to 104 C (219F)
MELTING POINT	Not applicable
FLASH POINT	Not Flammable
VAPOR PRESSURE	No data
SPECIFIC GRAVITY	1.43 +/- 0.02 g/ml
PRODUCT pH	7.00 (+/- 0.5)
SOLUBILITY IN WATER	Soluble

SECTION 6 INCOMPATIBILITIES AND STORAGE

Hazardous polymerization will not occur.
Stable under normal conditions. Can evolve hydrogen bromide/bromine when strongly heated.
Hazardous decomposition products: hydrogen bromide, bromide gas and sodium oxide.
Incompatible with strong acids and strong oxidizers.
Store in a dry, well-ventilated area. Keep containers tightly closed when not in use. Store at 0F or above.

SECTION 7 REGULATIONS/OSHA

OSHA Standard 29 CFR 1910.1200	HAZARD COMMUNICATION
OSHA Standard 29 CFR 1910.1000	AIR CONTAMINANTS Table Z-1
OSHA Standard 29 CFR 1910.94	VENTILATION
OSHA Standard 29 CFR 1910.134	RESPIRATORY PROTECTION
OSHA Standard 29 CFR 1910.20	ACCESS TO EMPLOYEE EXPOSURE
OSHA Standard 29 CFR 1910.132	PERSONAL PROTECTIVE EQUIPMENT
OSHA Standard 29 CFR 1910.141	SANITATION
OSHA Standard 29 CFR 1910.151	MEDICAL SERVICES AND FIRST AID
OSHA Standard 29 CFR 1910.133	EYE AND FACE PROTECTION

SECTION 8 EMERGENCY HANDLING OF HAZARDOUS MATERIALS

IF MATERIAL IS ON FIRE OR INVOLVED IN FIRE:

Negligible fire hazard when exposed to heat or flame. Product is non-combustible as supplied. Use water, foam, carbon dioxide or dry chemical to extinguish fire as appropriate to surrounding fire. Fire may result into the release of toxic fumes of bromine, hydrogen bromide and sodium oxide. Product may react with some metals (aluminum, zinc, tin, etc.) to release flammable hydrogen gas. Move container from fire area if you can without risk. Apply cooling water to sides to keep cool. Do not use water directly on material.

IF MATERIAL IS NOT ON FIRE OR NOT INVOLVED IN FIRE: Keep material out of water sources and sewers.

PERSONAL DANGER SITUATION PROTECTION:

Keep upwind. Avoid breathing dust/vapors/fumes from material. Avoid bodily contact with material. Wear boots, protective gloves and gas-tight goggles. Wear full protective clothing including SCBA (regular FIRE FIGHTERS' gear is inadequate).

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SECTION 9 SPILL, LEAK AND DISPOSAL PROCEDURES

Persons not wearing protective equipment and clothing should be restricted from spill areas until clean-up has been completed. If AS-740 is spilled, take the following steps:

- 1 - Ventilate area. Contain spills immediately with inert materials (sand, earth). The floor may be slippery, exercise caution to avoid falls.
- 2 - Transfer liquids and solid diking material to separate suitable containers for recovery or disposal. Wash spill site after material pickup is complete.
- 3 - Incinerate any material and the absorbent material in accordance to all FEDERAL, STATE, AND LOCAL REGULATIONS.

NOTE: DO NOT wash or pour AS-740 into any surface waters or streams or directly into sewers.

SECTION 10 SHIPPING AND TRANSPORTATION DATA

PROPER SHIPPING NAME	Disinfectant, NOIBN other than Medicinal
HAZARD CLASS	Not Regulated
IDENTIFICATION NUMBER	None
LABEL REQUIRED	None

SECTION 11 ECOLOGICAL INFORMATION

This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, pond or estuaries, oceans, or other waters unless in accordance with the requirements of a NPDES permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

H. Garcia-Munoz / A Scheurman

This information is given without any warranty or representation. We do not assume any legal responsibility for same, nor do we give permission, inducement, or recommendation to practice any patented invention without a license. It is offered solely for your consideration, investigation and verification. Before using any product, read its label carefully and completely.

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PENNSYLVANIA and MASSACHUSETTS RIGHT-TO-KNOW INFORMATION:

The following comprises the CHEMICAL IDENTIFICATION LIST

	<u>CAS#</u>
Water	7732-18-5
Sodium Bromide	7647-15-6

NEW JERSEY RIGHT-TO-KNOW TOTAL INGREDIENTS LABEL:

	<u>CAS#</u>
Water	7732-18-5
Sodium Bromide	7647-15-6

CALIFORNIA PROPOSITION 65:

This product does not contain toxic chemicals currently on the California list of known carcinogens and reproductive toxins

Pursuant to the California Safe Drinking Water and Toxic Enforcement Act of 1986 (proposition 65), this information is provided. This law requires that "clear and reasonable warning" be provided to any individual, knowingly or intentionally exposed to any substances identified by the state as being cancer or reproductive hazards unless, it can be shown that the exposure poses "no significant risk". Based on available data, the following chemicals listed by Proposition 65 may be present in this product:

NONE

**SAFETY DATA SHEET****PRODUCT****ACTI-BROM® 1318****EMERGENCY TELEPHONE NUMBER(S)****(800) 424-9300 (24 Hours) CHEMTREC****1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION****PRODUCT NAME :** ACTI-BROM® 1318**APPLICATION :** BIOCIDES**COMPANY IDENTIFICATION :** Nalco Company
1601 W. Diehl Road
Naperville, Illinois
60563-1198**EMERGENCY TELEPHONE NUMBER(S) :** (800) 424-9300 (24 Hours) CHEMTREC

NFPA 704M/HMIS RATING

HEALTH: 1/1 FLAMMABILITY: 0/0 INSTABILITY: 0/0 OTHER:
0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme * = Chronic Health Hazard**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Our hazard evaluation has identified the following chemical substance(s) as hazardous. Consult Section 15 for the nature of the hazard(s).

Hazardous Substance(s)	CAS NO.	% (w/w)
Sodium Bromide	7647-15-6	30.0 - 60.0

3. HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW******CAUTION**

Causes moderate eye irritation.

Avoid contact with eyes, skin and clothing. Wash with soap and water after handling. Remove contaminated clothing and wash before reuse.

May evolve hydrogen bromide and bromine under fire conditions.

PRIMARY ROUTES OF EXPOSURE :

Eye, Skin

HUMAN HEALTH HAZARDS - ACUTE :**EYE CONTACT :**

Can cause mild to moderate irritation.

SKIN CONTACT :

May cause irritation with prolonged contact.

Nalco Company 1601 W. Diehl Road • Naperville, Illinois 60563-1198 • (630)305-1000For additional copies of an MSDS visit www.nalco.com and request access



SAFETY DATA SHEET

PRODUCT

ACTI-BROM® 1318

EMERGENCY TELEPHONE NUMBER(S)

(800) 424-9300 (24 Hours) CHEMTREC

INGESTION :

Not a likely route of exposure. No adverse effects expected.

INHALATION :

Not a likely route of exposure. Aerosols or product mist may irritate the upper respiratory tract.

SYMPTOMS OF EXPOSURE :

Acute :

A review of available data does not identify any symptoms from exposure not previously mentioned.

Chronic :

A review of available data does not identify any symptoms from exposure not previously mentioned.

AGGRAVATION OF EXISTING CONDITIONS :

A review of available data does not identify any worsening of existing conditions.

HUMAN HEALTH HAZARDS - CHRONIC :

No adverse effects expected other than those mentioned above.

4. FIRST AID MEASURES

SKIN CONTACT :

Flush affected area with water. If symptoms develop, seek medical advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably, mouth-to-mouth. Get medical attention.[^]

5. FIRE FIGHTING MEASURES

FLASH POINT : None

EXTINGUISHING MEDIA :

Not expected to burn. Keep containers cool by spraying with water. Use extinguishing media appropriate for surrounding fire.

FIRE AND EXPLOSION HAZARD :

May evolve hydrogen bromide and bromine under fire conditions.



SAFETY DATA SHEET

PRODUCT

ACTI-BROM® 1318

EMERGENCY TELEPHONE NUMBER(S)

(800) 424-9300 (24 Hours) CHEMTREC

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING :

In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS :

Restrict access to area as appropriate until clean-up operations are complete. Ensure clean-up is conducted by trained personnel only. Ventilate spill area if possible. Do not touch spilled material. Stop or reduce any leaks if it is safe to do so. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Notify appropriate government, occupational health and safety and environmental authorities.

METHODS FOR CLEANING UP :

SMALL SPILLS: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. **LARGE SPILLS:** Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Wash site of spillage thoroughly with water. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

ENVIRONMENTAL PRECAUTIONS :

This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters, unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

7. HANDLING AND STORAGE

HANDLING :

Avoid eye and skin contact. Do not take internally. Do not get in eyes, on skin, on clothing. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Ensure all containers are labeled. Keep the containers closed when not in use. Use with adequate ventilation.

STORAGE CONDITIONS :

Store the containers tightly closed. Store in suitable labeled containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS :

This product does not contain any substance that has an established exposure limit.

ENGINEERING MEASURES :

General ventilation is recommended.

RESPIRATORY PROTECTION :

Respiratory protection is not normally needed. Respiratory protection is not normally needed. If significant mists, vapors or aerosols are generated an approved respirator is recommended. **HALF FACE SPECIAL MULTICONTAMINANT** with a Particulate pre-filter.



SAFETY DATA SHEET

PRODUCT

ACTI-BROM® 1318

EMERGENCY TELEPHONE NUMBER(S)

(800) 424-9300 (24 Hours) CHEMTREC

HAND PROTECTION :

Neoprene gloves Nitrile gloves Butyl gloves PVC gloves

SKIN PROTECTION :

Wear standard protective clothing.

EYE PROTECTION :

Wear chemical splash goggles.

HYGIENE RECOMMENDATIONS :

If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse. Keep an eye wash fountain available. Keep a safety shower available.

HUMAN EXPOSURE CHARACTERIZATION :

Based on our recommended product application and personal protective equipment, the potential human exposure is: Moderate

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE Liquid

APPEARANCE Colorless

ODOR None

SPECIFIC GRAVITY	1.45 @ 77 °F / 25 °C
DENSITY	12.1 lb/gal
SOLUBILITY IN WATER	Complete
pH (100 %)	7.9
VISCOSITY	5 cps
FREEZING POINT	7 °F / -14 °C
BOILING POINT	218 °F / 103.5 °C
VAPOR PRESSURE	5.6 mm Hg @ 68 °F / 20 °C
VOC CONTENT	0.00 %

Note: These physical properties are typical values for this product and are subject to change.

10. STABILITY AND REACTIVITY

STABILITY :

Stable under normal conditions.

HAZARDOUS POLYMERIZATION :

Hazardous polymerization will not occur.

CONDITIONS TO AVOID :

Freezing temperatures.



SAFETY DATA SHEET

PRODUCT

ACTI-BROM® 1318

EMERGENCY TELEPHONE NUMBER(S)

(800) 424-9300 (24 Hours) CHEMTREC

MATERIALS TO AVOID :

Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors.

HAZARDOUS DECOMPOSITION PRODUCTS :

Under fire conditions: None known

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY :

Species: Rat
LD50: > 5,000 mg/kg
Test Descriptor: Similar Product

ACUTE DERMAL TOXICITY :

Species: Rabbit
LD50: > 2,000 mg/kg
Test Descriptor: Similar Product

PRIMARY SKIN IRRITATION :

Species: Rabbit
Draize Score: 0.0 /8.0
Test Descriptor: Similar Product

PRIMARY EYE IRRITATION :

Species: Rabbit
Draize Score: 16.0 /110.0
Test Descriptor: Similar Product

SENSITIZATION :

This product is not expected to be a sensitizer.

CARCINOGENICITY :

None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).

HUMAN HAZARD CHARACTERIZATION :

Based on our hazard characterization, the potential human hazard is: Low

**SAFETY DATA SHEET****PRODUCT****ACTI-BROM® 1318****EMERGENCY TELEPHONE NUMBER(S)****(800) 424-9300 (24 Hours) CHEMTREC****12. ECOLOGICAL INFORMATION****ECOTOXICOLOGICAL EFFECTS :**

The following results are for the product and a similar product. The following results are for the active components. The following results are for the hypobromous acid (as Br₂) generated from sodium bromide and hypochlorite.

ACUTE FISH RESULTS :

Species	Exposure	LC50	Test Descriptor
Fathead Minnow	96 hrs	> 5,000 mg/l	Product
Rainbow Trout	96 hrs	> 1,000 mg/l	Similar Product
Bluegill Sunfish	96 hrs	> 1,000 mg/l	Similar Product
Fathead Minnow	96 hrs	0.097 mg/l	HOBr (Generated from NaBr)
Rainbow Trout	96 hrs	0.23 mg/l	HOBr (Generated from NaBr)
Bluegill Sunfish	96 hrs	0.52 mg/l	HOBr (Generated from NaBr)
Sheepshead Minnow	96 hrs	0.19 mg/l	HOBr (Generated from NaBr)

ACUTE INVERTEBRATE RESULTS :

Species	Exposure	LC50	EC50	Test Descriptor
Daphnia magna	48 hrs	7,900 mg/l		Active Substance (Sodium Bromide)
Ceriodaphnia dubia	48 hrs	> 5,000 mg/l		Product
Daphnia magna	48 hrs	0.038 mg/l		HOBr (Generated from NaBr)
American Oyster	96 hrs	0.54 mg/l		HOBr (Generated from NaBr)
Mysid Shrimp (Mysidopsis bahia)	96 hrs	0.17 mg/l		HOBr (Generated from NaBr)

ADDITIONAL ECOLOGICAL DATA

AOX information: Product contains no organic halogens.

PERSISTENCY AND DEGRADATION :

Biological Oxygen Demand (BOD) : This material is an oxidizing biocide and is not expected to persist in the environment.

Greater than 95% of this product consists of inorganic substances for which a biodegradation value is not applicable.

MOBILITY :

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	Water	Soil/Sediment
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**SAFETY DATA SHEET****PRODUCT****ACTI-BROM® 1318****EMERGENCY TELEPHONE NUMBER(S)****(800) 424-9300 (24 Hours) CHEMTREC**

<5%	30 - 50%	50 - 70%
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The portion in water is expected to be soluble or dispersible.

BIOACCUMULATION POTENTIAL

This preparation or material is not expected to bioaccumulate.

ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION

Based on our hazard characterization, the potential environmental hazard is: Low

Based on our recommended product application and the product's characteristics, the potential environmental exposure is: Moderate

If released into the environment, see CERCLA/SUPERFUND in Section 15.

13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

As a non-hazardous waste, it is not subject to federal regulation. Consult state or local regulation for any additional handling, treatment or disposal requirements. For disposal, contact a properly licensed waste treatment, storage, disposal or recycling facility.

DO NOT REUSE EMPTY CONTAINER. Triple rinse the container (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerate. Burn only if allowed by state and local authorities. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

The information in this section is for reference only and should not take the place of a shipping paper (bill of lading) specific to an order. Please note that the proper Shipping Name / Hazard Class may vary by packaging, properties, and mode of transportation. Typical Proper Shipping Names for this product are as follows.

LAND TRANSPORT :

Proper Shipping Name :

**PRODUCT IS NOT REGULATED DURING
TRANSPORTATION**

AIR TRANSPORT (ICAO/IATA) :

Proper Shipping Name :

**PRODUCT IS NOT REGULATED DURING
TRANSPORTATION**

MARINE TRANSPORT (IMDG/IMO) :

Proper Shipping Name :

**PRODUCT IS NOT REGULATED DURING
TRANSPORTATION**



SAFETY DATA SHEET

PRODUCT

ACTI-BROM® 1318

EMERGENCY TELEPHONE NUMBER(S)

(800) 424-9300 (24 Hours) CHEMTREC

15. REGULATORY INFORMATION

This section contains additional information that may have relevance to regulatory compliance. The information in this section is for reference only. It is not exhaustive, and should not be relied upon to take the place of an individualized compliance or hazard assessment. Nalco accepts no liability for the use of this information.

NATIONAL REGULATIONS, USA :

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200 :

Based on our hazard evaluation, the following substance(s) in this product is/are hazardous and the reason(s) is/are shown below.

Sodium Bromide : Non-Hazardous

CERCLA/SUPERFUND, 40 CFR 117, 302 :

Notification of spills of this product is not required.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) - SECTIONS 302, 311, 312, AND 313 :

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355) :

This product does not contain substances listed in Appendix A and B as an Extremely Hazardous Substance.

SECTIONS 311 AND 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370) :

Our hazard evaluation has found this product to be hazardous. The product should be reported under the following indicated EPA hazard categories:

X	Immediate (Acute) Health Hazard
-	Delayed (Chronic) Health Hazard
-	Fire Hazard
-	Sudden Release of Pressure Hazard
-	Reactive Hazard

Under SARA 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are: 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372) :

This product does not contain substances on the List of Toxic Chemicals.

TOXIC SUBSTANCES CONTROL ACT (TSCA) :

This product is exempted under TSCA and regulated under FIFRA. The inerts are on the Inventory List.

FOOD AND DRUG ADMINISTRATION (FDA) Federal Food, Drug and Cosmetic Act :

When use situations necessitate compliance with FDA regulations, this product is acceptable under : 21 CFR 176.170 Components of paper and paperboard in contact with aqueous and fatty foods and 21 CFR 176.180 Components of paper and paperboard in contact with dry foods., 21 CFR 176.300 Slimicides, The following limitations apply:



SAFETY DATA SHEET

PRODUCT

ACTI-BROM® 1318

EMERGENCY TELEPHONE NUMBER(S)

(800) 424-9300 (24 Hours) CHEMTREC

This product may be used to treat pulp and papermill water systems in situations requiring FDA sanction provided the bromide concentration in the water is kept below 22 ppm. The product must be used in conjunction with an oxidant such as bleach or gaseous chlorine. Follow instructions for use in pulp and papermill on the product label.

FEDERAL INSECTICIDE, FUNGICIDE AND RODENTICIDE ACT (FIFRA) :
EPA Reg. No. 5185-467-1706

In all cases follow instructions on the product label.

This product has been certified as KOSHER/PAREVE for year-round use INCLUDING THE PASSOVER SEASON by the CHICAGO RABBINICAL COUNCIL.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 / formerly Sec. 307, 40 CFR 116.4 / formerly Sec. 311 :

Substances listed under this regulation are not intentionally added or expected to be present in this product. Listed components may be present at trace levels.

CLEAN AIR ACT, Sec. 112 (40 CFR 61, Hazardous Air Pollutants), Sec. 602 (40 CFR 82, Class I and II Ozone Depleting Substances) :

Substances listed under this regulation are not intentionally added or expected to be present in this product. Listed components may be present at trace levels.

CALIFORNIA PROPOSITION 65 :

Substances listed under California Proposition 65 are not intentionally added or expected to be present in this product.

MICHIGAN CRITICAL MATERIALS :

Substances listed under this regulation are not intentionally added or expected to be present in this product. Listed components may be present at trace levels.

STATE RIGHT TO KNOW LAWS :

This product is a registered biocide and is exempt from State Right to Know Labelling Laws.

NATIONAL REGULATIONS, CANADA :

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) :

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS CLASSIFICATION :

Pesticide controlled products are not regulated under WHMIS.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) :

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).



SAFETY DATA SHEET

PRODUCT

ACTI-BROM® 1318

EMERGENCY TELEPHONE NUMBER(S)

(800) 424-9300 (24 Hours) CHEMTREC

AUSTRALIA

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

CHINA

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on the Inventory of Existing Chemical Substances China (IECSC).

EUROPE

The substances in this preparation have been reviewed for compliance with the EINECS or ELINCS inventories.

JAPAN

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

KOREA

All substances in this product comply with the Toxic Chemical Control Law (TCCL) and are listed on the Existing Chemicals List (ECL)

PHILIPPINES

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

16. OTHER INFORMATION

Due to our commitment to Product Stewardship, we have evaluated the human and environmental hazards and exposures of this product. Based on our recommended use of this product, we have characterized the product's general risk. This information should provide assistance for your own risk management practices. We have evaluated our product's risk as follows:

* The human risk is: Low

* The environmental risk is: Low

Any use inconsistent with our recommendations may affect the risk characterization. Our sales representative will assist you to determine if your product application is consistent with our recommendations. Together we can implement an appropriate risk management process.

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

REFERENCES

Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, American Conference of Governmental Industrial Hygienists, OH., (Ariel Insight CD-ROM Version), Ariel Research Corp., Bethesda, MD.



SAFETY DATA SHEET

PRODUCT

ACTI-BROM® 1318

EMERGENCY TELEPHONE NUMBER(S)

(800) 424-9300 (24 Hours) CHEMTREC

Hazardous Substances Data Bank, National Library of Medicine, Bethesda, Maryland (TOMES CPS CD-ROM Version), Micromedex, Inc., Englewood, CO.

IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, Geneva: World Health Organization, International Agency for Research on Cancer.

Integrated Risk Information System, U.S. Environmental Protection Agency, Washington, D.C. (TOMES CPS CD-ROM Version), Micromedex, Inc., Englewood, CO.

Annual Report on Carcinogens, National Toxicology Program, U.S. Department of Health and Human Services, Public Health Service.

Title 29 Code of Federal Regulations, Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA), (Ariel Insight CD-ROM Version), Ariel Research Corp., Bethesda, MD.

Registry of Toxic Effects of Chemical Substances, National Institute for Occupational Safety and Health, Cincinnati, OH, (TOMES CPS CD-ROM Version), Micromedex, Inc., Englewood, CO.

Ariel Insight (An integrated guide to industrial chemicals covered under major regulatory and advisory programs), North American Module, Western European Module, Chemical Inventories Module and the Generics Module (Ariel Insight CD-ROM Version), Ariel Research Corp., Bethesda, MD.

The Teratogen Information System, University of Washington, Seattle, WA (TOMES CPS CD-ROM Version), Micromedex, Inc., Englewood, CO.

Prepared By : Product Safety Department

Date issued : 07/31/2009

Version Number : 1.18

Applied Specialties, Inc.
33555 Pin Oak Parkway
Lake, Ohio 44012

AS-9838

071499838-5
May 29, 2007
Telephone (440) 933-9442
Emergency: (216) 973-6118

MATERIAL SAFETY DATA

SECTION 1 MATERIAL IDENTIFICATION

PRODUCT NAME OR AS-9838
SYNONYMS BOILER WATER TREATMENT

SECTION 2 INGREDIENTS AND HAZARDS

COMPONENT	CAS. NUMBER	TWA/CEILING	REFERENCE
Sodium Bisulfite	7631-90-5	5 mg/m ³	ACGIH

EMERGENCY OVERVIEW: Clear Liquid, Sulfurous Odor. CAUTION! May Cause Eye Irritation And Burns. May Cause Skin Irritation. Harmful If Ingested Or Inhaled. May Cause Reactions In Sulfite Sensitive Individuals.

SECTION 3 REGULATORY INFORMATION

OSHA STATUS This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard
Hazard Status All components are listed

CERCLA REPORTABLE QUANTITY Sodium Bisulfite -5,000 lbs.

SECTION 302 (EXTREMELY HAZARDOUS SUBSTANCE) Not Listed

SECTION 311/312 (HAZARDOUS SUBSTANCES)

Classification Under Section 311/312 of SARA (40 CFR 370): Acute (Yes) Chronic (No) Fire (No) Reactive (N) Pressure (No)

SECTION 313 (TOXIC CHEMICALS): None

RCRA STATUS Not Regulated.

NTP, OSHA, ACGIH & IARC STATUS Not listed

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS)

HEALTH - 2 FIRE - 0 REACTIVITY - 0

0 MINIMAL
1 SLIGHT HAZARD
2 MODERATE HAZARD
3 SERIOUS HAZARD
4 SEVERE HAZARD

Chemical identity of some ingredients may be withheld as confidential as permitted by 29 CFR 1910.1200 and various State right to know laws.

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SECTION 4 HEALTH HAZARD AND PROTECTION DATA

TARGET ORGANS

Eyes Skin Gastrointestinal System Respiratory System Mucous Membranes
Pulmonary Tract

ROUTES OF ENTRY INTO BODY

Inhalation Ingestion Skin Or Eye Contact

SIGNS AND SYMPTOMS OF EXPOSURE

Eye Irritation And Burns Skin Irritation Gastrointestinal Distress
Eye Redness & Itching Tearing Or Blurry Vision
Coughing Chest Tightness Mucous Membrane Irritation
Respiratory Irritation Dermatitis Nausea Vomiting Diarrhea
Headache Note: May Cause Severe Reactions In Asthmatics And Sulfite Sensitive Individuals.

PROTECTIVE EQUIPMENT REQUIRED:

Employees should be provided with and required to use impervious clothing such as apron, boots, pants and jacket, gloves, splash goggles or safety glasses as a minimum and other appropriate protective clothing to prevent skin contact. Employees shall be provided with and required to use splash-proof safety goggles where the material may contact the eyes in addition to face shield. Appropriate gloves include those made from neoprene and nitrile. Clothing with product should be placed in a closed container until provisions are made for it to be discarded or laundered. If the clothing is to be laundered the person performing the laundering should be informed of the hazardous properties of the material. Any clothing that becomes wet with the material should be removed immediately and not worn until the clothing has been properly cleaned. **RESPIRATOR SELECTION** - Use only in well ventilated areas. Where the potential for excessive exposures exists which cannot be controlled by mechanical means, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations. **ESCAPE & FIRE FIGHTING** - Self-contained breathing apparatus with a face-piece operated in a pressure demand or other positive-pressure mode.

FIRST AID

SKIN CONTACT: Skin that becomes contaminated should be washed or showered with large amounts of water to remove any chemical from skin. Contaminated clothing should be removed and the skin washed with soap and water. Clothing should be washed before it is reused. Discard contaminated footwear, which can not be decontaminated. If irritation persists, seek medical attention.

EYE CONTACT: If material gets into the eyes, flush the eyes immediately with large amounts of water for at least 30 minutes, lifting the lower and upper lids occasionally. Get **MEDICAL** attention immediately. Contact lenses should not be worn when working with this substance or any other chemical. Eyewash should be available.

INHALATION: If a person breathes in large amounts of product mist, move the person to fresh air. If breathing has stopped, perform artificial respiration. Keep the affected person warm and at rest. Get medical attention as soon as possible.

INGESTION: If conscious, give 2 glasses of water. **Get medical attention immediately.** Never give anything by mouth to an unconscious person.

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SECTION 5 PHYSICAL DESCRIPTION

APPEARANCE AND ODOR	Clear liquid; sulfurous odor.
BOILING POINT	Not determined
MELTING POINT	Not applicable
FLASH POINT	Not applicable
VAPOR PRESSURE	Not determined
SPECIFIC GRAVITY	1.336 +/- 0.02 g/ml
PRODUCT pH	5.55 +/- 0.50 standard pH units
SOLUBILITY IN WATER	Complete

SECTION 6 INCOMPATIBILITIES AND STORAGE

Stable
Hazardous Polymerization Will Not Occur
Keep Containers Closed When Not In Use. Do Not Store In Unlined Steel Drums Or Equipment
Store Containers With Labels Visible

SECTION 7 REGULATIONS/OSHA

OSHA Standard 29 CFR 1910.1200	HAZARD COMMUNICATION
OSHA Standard 29 CFR 1910.1000	AIR CONTAMINANTS Table Z-1
OSHA Standard 29 CFR 1910.94	VENTILATION
OSHA Standard 29 CFR 1910.134	RESPIRATORY PROTECTION
OSHA Standard 29 CFR 1910.20	ACCESS TO EMPLOYEE EXPOSURE
OSHA Standard 29 CFR 1910.132	PERSONAL PROTECTIVE EQUIPMENT
OSHA Standard 29 CFR 1910.141	SANITATION
OSHA Standard 29 CFR 1910.151	MEDICAL SERVICES AND FIRST AID
OSHA Standard 29 CFR 1910.133	EYE AND FACE PROTECTION

SECTION 8 EMERGENCY HANDLING OF HAZARDOUS MATERIALS

IF MATERIAL IS ON FIRE OR INVOLVED IN FIRE:

Use water, alcohol foam or carbon dioxide CO₂ or dry chemical extinguishers or any agents suitable for surrounding fire. Keep material out of water sources and sewers.

IF MATERIAL IS NOT ON FIRE OR NOT INVOLVED IN FIRE: Keep material out of water sources and sewers.

PERSONAL DANGER SITUATION PROTECTION:

Keep upwind. Avoid breathing dust/vapors/fumes from material. Avoid bodily contact with material. Wear boots, protective gloves and gas-tight goggles. Wear full protective clothing (regular FIRE FIGHTERS' gear is inadequate).

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SECTION 9 SPILL, LEAK AND DISPOSAL PROCEDURES

Persons not wearing protective equipment and clothing should be restricted from spill areas until clean-up has been completed. If AS-9838 is spilled, take the following steps:

1. Ventilate the spill area. Contain by diking.
2. Collect spilled material using an approved liquid vacuum for reuse.
3. Apply an absorbing compound to any residual material and shovel into a disposal drum.
4. Discard any vacuumed material and the absorbent material in accordance to all FEDERAL, STATE AND LOCAL REGULATIONS.

NOTE: DO NOT wash or pour AS-9838 into any surface waters or streams or directly into sewers.

SECTION 10 SHIPPING AND TRANSPORTATION DATA

Drums and/or Bulk < 1,396 gallons or 15,355 lbs.

PROPER SHIPPING NAME	Compounds, Boiler Cleansing, Preserving, Scale Preventing Or Scale Removing Liquid
HAZARD CLASS	None
MC RATING	50093 SUB 2
LABEL REQUIRED	None

Bulk > 1,396 gallons or 15,355 lbs.

PROPER SHIPPING NAME	Environmentally Hazardous Substance, Liquid, N. O. S., (Sodium Bisulfite)
HAZARD CLASS	9
IDENTIFICATION NUMBER	UN3082
PACKAGING GROUP	III
LABEL REQUIRED	Class 9

T. L. Molnar / H. García-Muñoz

This information is given without any warranty or representation. We do not assume any legal responsibility for same, nor do we give permission, inducement, or recommendation to practice any patented invention without a license. It is offered solely for your consideration, investigation and verification. Before using any product, read its label carefully and completely.

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PENNSYLVANIA RIGHT-TO-KNOW INFORMATION

The following comprises the CHEMICAL IDENTIFICATION list under PENNSYLVANIA RIGHT-TO-KNOW:

	<u>CAS #</u>
Water	7732-18-5
Sodium Bisulfite	7631-90-5
Sodium Sulfite	7757-83-7
Potassium Bisulfite	7773-03-7
Potassium Sulfite	10117-38-7

NEW JERSEY RIGHT-TO-KNOW TOTAL INGREDIENTS LABEL:

	<u>CAS #</u>
Water	7732-18-5
Sodium Bisulfite	7631-90-5
Sodium Sulfite	7757-83-7
Potassium Bisulfite	7773-03-7
Potassium Sulfite	10117-38-7

CALIFORNIA PROPOSITION 65:

This product does not contain toxic chemicals currently on the California list of known carcinogens and reproductive toxins

Pursuant to the California Safe Drinking Water and Toxic Enforcement Act of 1986 (proposition 65), this information is provided. This law requires that "clear and reasonable warning" be provided to any individual, knowingly or intentionally exposed to any substances identified by the state as being cancer or reproductive hazards unless, it can be shown that the exposure poses "no significant risk". Based on available data, the following chemicals listed by Proposition 65 may be present in this product:

NO SUBSTANCES FOUND TO BE PRESENT IN DETECTABLE LEVELS.

Material Safety Data Sheet

Material Name: Sodium Metabisulphite or Sodium Metabisulfite

ID: C1-143

*** Section 1 - Chemical Product and Company Identification ***

Chemical Name: Sodium Metabisulphite (Technical, Photo and Food Grades) or Sodium Metabisulfite

Product Use: For Commercial Use

Synonyms: Disulfurous acid, Disodium salt, Fertilisil; Pyrosulfurous acid, disodium salt; Sodium disulfite; Disodium pyrosulfite; Sodium pyrosulfite.

Supplier Information

Chem One Ltd.

8017 Pinemont Drive, Suite 100

Houston, Texas 77040-6519

Phone: (713) 896-9966

Fax: (713) 896-7540

Emergency # (800) 424-9300 or (703) 527-3887

General Comments: FOR COMMERCIAL USE ONLY; NOT TO BE USED AS A PESTICIDE.

NOTE: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

*** Section 2 - Composition / Information on Ingredients ***

CAS #	Component	Percent
7681-57-4	Sodium Metabisulfite	> 95%

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Sulfites.

Component Information/Information on Non-Hazardous Components

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

*** Section 3 - Hazards Identification ***

Emergency Overview

Sodium Metabisulfite is a white crystal or white/yellow powder form. May cause severe allergic reaction in asthmatics and sulfite sensitive individuals. May be harmful if swallowed. May cause eye, skin and respiratory tract irritation. This product is not flammable. Thermal decomposition of this product produces irritating vapors and toxic gases (e.g. sulfur dioxide), which may increase fire hazard due to the flammability of sulfur dioxide. Emergency responders should wear proper personal protective equipment for the releases to which they are responding.

Hazard Statements

WARNING! CAUSES SKIN AND EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE ALLERGIC SKIN OR RESPIRATORY REACTION. Keep from contact with clothing. Do not taste or swallow. Do not get on skin or in eyes. Avoid breathing dusts or particulates. Avoid prolonged or repeated contact with skin. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. **WARNING! Contact with acids, water or ice releases sulfur dioxide gas which may be harmful or deadly if inhaled. Use of this product in confined spaces may cause suffocation leading to death. Do not use in unventilated areas such as in the holds of fishing boats, walk-in coolers or confined spaces. Use only in ventilated areas.**

Potential Health Effects: Eyes

Exposure to particulates or solution of this product may cause stinging, tearing and redness. Prolonged contact with solutions of this product may cause conjunctivitis, ulceration and corneal abnormalities.

Potential Health Effects: Skin

This product can cause irritation of the skin, especially after prolonged exposures. Repeated skin contact may lead to skin sensitization, an allergic reaction and dermatitis (red, cracked skin). Skin contact can cause allergic skin reaction in susceptible individuals, with symptoms including itching, rash and welts.

Potential Health Effects: Ingestion

Ingestion of this product can irritate the tissues of the mouth, esophagus, and other tissues of the digestive system. Symptoms of exposure can include central nervous system depression, gastrointestinal and cardiac abnormalities, and violent colic. Sulfite compounds, such as this product, can cause a severe allergic reaction in sensitive individuals and some asthmatics, which can be life-threatening.

Potential Health Effects: Inhalation

Breathing dusts or particulates generated by this product can lead to irritation of the nose, throat or respiratory system. Symptoms of such exposure could include coughing and sneezing. This product can cause an asthma-like allergy with symptoms such as shortness of breath, wheezing, coughing, urticaria, angioedema, nasal congestion, nasal polyp swelling and chest tightness. Severe general (anaphylactic) reactions can occur, which can be life-threatening in some cases.

HMIS Ratings: Health Hazard: 2* Fire Hazard: 0 Physical Hazard: 1

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

Material Safety Data Sheet

Material Name: Sodium Metabisulphite or Sodium Metabisulfite

ID: C1-143

*** Section 4 - First Aid Measures ***

First Aid: Eyes

In case of contact with eyes, rinse immediately with plenty of water for at least 20 minutes. Seek immediate medical attention if any adverse effect occurs.

First Aid: Skin

Remove all contaminated clothing. For skin contact, wash thoroughly with soap and water for at least 20 minutes. Seek immediate medical attention if irritation develops or persists.

First Aid: Ingestion

Have victim rinse mouth thoroughly with water. **DO NOT INDUCE VOMITING.** Have victim rinse mouth thoroughly with water, if conscious. Contact a physician or poison control center immediately. Never give anything by mouth to a victim who is unconscious or having convulsions.

First Aid: Inhalation

Remove source of contamination or move victim to fresh air. Apply artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult. Get immediate medical attention.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically.

*** Section 5 - Fire Fighting Measures ***

Flash Point: Not flammable

Upper Flammable Limit (UEL): Not applicable

Auto Ignition: Not applicable

Rate of Burning: Not applicable

Method Used: Not applicable

Lower Flammable Limit (LEL): Not applicable

Flammability Classification: Not applicable

General Fire Hazards

When involved in a fire, this material may decompose and produce irritating vapors, acid smoke and toxic gases (i.e. sulfur oxides and sodium oxides). Contact with acids, water and ice produces sulfur oxide, which presents a fire hazard due to its flammability. Sodium Metabisulfite is a reducing agent and reacts explosively with oxidizers.

Hazardous Combustion Products

Sodium sulfide and sulfur oxides.

Extinguishing Media

In case of fire, use water fog, dry chemical, carbon dioxide or regular foam.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self-contained breathing apparatus. If possible control runoff from fire control or dilution water to prevent environmental contamination.

NFPA Ratings: Health: 2 Fire: 0 Reactivity: 1 Other:

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Containment Procedures

Stop the flow of material, if this can be done without risk. Contain the discharged material. If sweeping of a contaminated area is necessary use a dust suppressant agent, which does not react with product (see Section 10 for incompatibility information).

Clean-Up Procedures

Small releases can be cleaned-up wearing gloves, goggles and suitable body protection. In case of a large spill (in which excessive dusts can be generated), clear the affected area, protect people, and respond with trained personnel. Place all spill residues in an appropriate container and seal. Thoroughly wash the area after a spill or leak clean-up. Prevent spill rinsate from contamination of storm drains, sewers, soil or groundwater.

Evacuation Procedures

Evacuate the area promptly and keep upwind of the spilled material. Isolate the spill area to prevent people from entering. In case of large spills, follow all facility emergency response procedures.

Special Procedures

Remove soiled clothing and launder before reuse. Avoid all skin contact with the spilled material. Have emergency equipment readily available.

Material Safety Data Sheet

Material Name: Sodium Metabisulphite or Sodium Metabisulfite

ID: C1-143

*** Section 7 - Handling and Storage ***

Handling Procedures

Do not breathe dust. Avoid all contact with skin and eyes. Use this product only with adequate ventilation. Wash thoroughly after handling. Avoid accumulation of dusts of this product. Remove contaminated clothing immediately. Keep in dust-tight containers. Keep away from all heat sources. **Individuals responsible for the procurement, use or application of Sodium Metabisulfite must familiarize themselves with the appropriate safety and handling precautions involved. Specifically, for the prevention of Black Spot on shrimp, Sodium Metabisulfite should only be used as a dilute (1.25%) solution and only in well-ventilated area. NEVER USE SODIUM METABISULFITE IN A DRY FORM DIRECTLY ON THE SHRIMP AND NEVER IN A CONFINED SPACE SUCH AS THE HOLD OF A SHRIMP BOAT OR A WALK-IN COOLER. DEADLY SULFUR DIOXIDE GAS CAN BE GENERATED AND ACCUMULATED IN CONFINED SPACES, CREATING AN EXTREMELY HAZARDOUS CONDITION WHICH CAN CAUSE SUFFOCATION LEADING TO DEATH.**

Storage Procedures

All employees who handle this material should be trained to handle it safely. Open containers slowly on a stable surface. Containers of this product must be properly labeled. Empty containers may contain residual amounts of this product; therefore, empty containers should be handled with care. Keep this product in an airtight container. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Store away from incompatible materials (see Section 10, Stability and Reactivity). Keep container tightly closed when not in use. Inspect all incoming containers before storage to ensure containers are properly labeled and not damaged. Do not store this material in open or unlabeled containers. Limit quantity of material stored.

*** Section 8 - Exposure Controls / Personal Protection ***

Exposure Guidelines

A: General Product Information

Sulfur Dioxide, which is released slowly at ambient temperatures from this material, has established exposure limits as follows:

ACGIH: 5.2 mg/m³ TWA

13 mg/m³ STEL

OSHA: 13 mg/m³ TWA; 5 mg/m³ (Vacated 1989 PEL)

13 mg/m³ (Vacated 1989 PEL)

NIOSH: 5 mg/m³ TWA

13 mg/m³ STEL

100 ppm (IDLH)

DFG MAKs 5.3 mg/m³ TWA (Inhalable fraction of the aerosol)

1•MAK 15 min., average value, 1-hr interval

B: Component Exposure Limits

The exposure limits given are for Sodium Metabisulfite (7681-57-4).

ACGIH: 5 mg/m³ TWA

NIOSH: 5 mg/m³ TWA

Engineering Controls

Use mechanical ventilation such as dilution and local exhaust, necessary for use in enclosed or confined spaces due to the slow release of sulfur dioxide. Use a corrosion-resistant ventilation system and exhaust directly to the outside. Treatment of exhaust gases may be required to prevent environmental contamination. Supply ample air replacement.

PERSONAL PROTECTIVE EQUIPMENT

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132). Please reference applicable regulations and standards for relevant details.

Personal Protective Equipment: Eyes/Face

Wear safety glasses (or goggles). If necessary, refer to U.S. OSHA 29 CFR 1910.133.

Personal Protective Equipment: Skin

Wear impervious gloves, boots and coveralls to avoid skin contact. Gloves should be tested to determine their suitability for prolonged contact with this material. If necessary, refer to U.S. OSHA 29 CFR 1910.138.

Material Safety Data Sheet

Material Name: Sodium Metabisulphite or Sodium Metabisulfite

ID: C1-143

*** Section 8 - Exposure Controls / Personal Protection (Continued) ***

Personal Protective Equipment: Respiratory

If airborne concentration is high, use an appropriate respirator or dust mask. If airborne concentrations are above the applicable exposure limits, use NIOSH-approved respiratory protection. If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U.S. State regulations. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under OSHA's Respiratory Protection Standard (1910.134-1998).

Personal Protective Equipment: General

Wash hands thoroughly after handling material. Do not eat, drink or smoke in work areas. Have a safety shower or eyewash fountain available. Use good hygiene practices when handling this material, including changing and laundering work clothes after use. Discard contaminated shoes and leather goods.

*** Section 9 - Physical & Chemical Properties ***

Physical Properties: Additional Information

The data provided in this section are to be used for product safety handling purposes. Please refer to Product Data Sheets, Certificates of Conformity or Certificates of Analysis for chemical and physical data for determinations of quality and for formulation purposes.

Appearance:	White to yellowish crystalline powder	Odor:	Mild odor of rotten eggs (sulfurous)
Physical State:	Solid	pH:	4.5-5 (10% solution)
Vapor Pressure:	Not applicable	Vapor Density:	Not applicable
Boiling Point:	Not applicable	Freezing/Melting Point:	302 deg F (150 deg C)
Solubility (H2O):	40% @ 20 deg C	Specific Gravity:	1.4 (H2O = 1)
Softening Point:	Decomposes upon heating	Particle Size:	Not determined
Molecular Weight:	190.13	Bulk Density:	1.48 g/cc
		Chemical Formula:	Na2S2O5

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

Product is normally stable. Sodium Metabisulfite is air and moisture sensitive and releases sulfur dioxide slowly at ambient temperatures. Sodium Metabisulfite will decompose on heating to form sodium sulfate.

Chemical Stability: Conditions to Avoid

Avoid moisture, high temperatures, exposure to air and incompatible materials.

Incompatibility

This material is incompatible with strong oxidizers, sodium nitrite and alkalis. Sodium Metabisulfite may produce sulfur dioxide gas when in contact with acids and/or water and ice. Large-scale addition of solid sodium disulfite to an unstirred and too-concentrated solution of sodium nitrite may cause a vigorous exothermic reaction.

Hazardous Decomposition

Products of thermal decomposition include sodium sulfate, sulfur oxides, and sodium oxide. Products of hydrolysis include sodium dioxide.

Hazardous Polymerization

Will not occur.

*** Section 11 - Toxicological Information ***

Acute and Chronic Toxicity

A: General Product Information

May cause eye, skin, nose, throat and respiratory tract irritation. May be harmful if swallowed.

Chronic: Long term skin overexposure to this product may lead to dermatitis (red, itchy skin). Prolonged or repeated contact may cause allergic respiratory and skin reactions in sensitive individuals. Respiratory sensitization can be life-threatening in some cases.

B: Component Analysis - LD50/LC50

Sodium Metabisulfite (7681-57-4):

LD₅₀-Intravenous-rat: 115 mg/kg; LD₅₀-Parenteral-mouse: 910 mg/kg; LD₅₀-Oral-mouse: 5989 mg/kg; LDLo-Intravenous-mouse: 1220 mg/kg; LD₅₀-Intravenous-rabbit: 1220 mg/kg

Material Safety Data Sheet

Material Name: Sodium Metabisulphite or Sodium Metabisulfite

ID: C1-143

*** Section 11 - Toxicological Information (Continued) ***

Acute and Chronic Toxicity (continued):

B: Component Analysis - TDLo/LDLo

Sodium Metabisulfite (7681-57-4):

LDLo-Intravenous-rabbit: 192 mg/kg; TDLo-Oral-rat: 75 mg/kg/15 days-continuous: Kidney, Urethra, Bladder: other changes; Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels: phosphatases, Enzyme inhibition, induction, or change in blood or tissue levels:- dehydrogenases; TDLo - Oral - pig: 562 gm/kg/48 weeks-continuous: Liver: changes in liver weight Kidney, Urethra, Bladder: changes in bladder weight Nutritional and Gross Metabolic - weight loss or decreased weight gain; TDLo-Oral-rat: 20 gm/kg: multigenerations: Reproductive: Effects on Newborn: stillbirth; TDLo-Oral-rat: 40 gm/kg: multigenerations: Reproductive: Effects on Newborn: weaning or lactation index (e.g., # alive at weaning per # alive at day 4); Cytogenetic analysis-hamster Ovary: 180 µg/L; Sister chromatid exchange: Rodent-hamster Ovary: 200 µg/L; TDLo-Subcutaneous-mouse: 806 mg/kg/26 weeks-intermittent: Tumorigenic: equivocal tumorigenic agent by RTECS criteria Skin and Appendages: tumors; TDLo-Oral-mouse: 14 gm/kg: female 8-12 day(s) after conception: Reproductive: Effects on Newborn: other neonatal measures or effects; TDLo-Parenteral-mouse: 60 mg/kg: female 8 day(s) after conception: Reproductive: Effects on Embryo or Fetus: fetotoxicity (except death, e.g., stunted fetus), Specific Developmental Abnormalities: musculoskeletal system

Carcinogenicity

A: General Product Information

No information available.

B: Component Carcinogenicity

Sodium Metabisulfite (7681-57-4)

ACGIH: TLV-A4 - Not classifiable as a Human Carcinogen

Sulfur Dioxide (decomposition product)

ACGIH: TLV-A4 - Not classifiable as a Human Carcinogen

IARC: Group 3 - Not classifiable as to carcinogenicity in humans.

Epidemiology

Sodium metabisulfite has caused severe allergic reactions in asthmatics and sulfite sensitive individuals.

Neurotoxicity

Has not been identified.

Mutagenicity

Human mutation data are available for Sodium Metabisulfite, these data were obtained during clinical studies on specific human tissues exposed to high doses of this compound.

Teratogenicity

Clinical studies on test animals exposed to relatively high doses of Sodium Metabisulfite provided teratogenic data.

Other Toxicological Information

No information available.

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

This product is expected to be harmful to aquatic life in low concentration.

B: Ecotoxicity

No information available.

Environmental Fate

Sodium Metabisulfite:

Water Solubility = 470 g/L (20°C).

Chemical Oxygen Demand (COD) = 165 mg oxygen/g compound

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

A: General Product Information

Sodium Metabisulfite is considered hazardous to the environment in aqueous solutions. EPA waste number for reactivity (D003) may be applicable to wastes of this product.

Material Safety Data Sheet

Material Name: Sodium Metabisulphite or Sodium Metabisulfite

ID: C1-143

*** Section 13 - Disposal Considerations (Continued) ***

US EPA Waste Number & Descriptions (continued):

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

All wastes must be handled in accordance with local, state and federal regulations or with regulations of Canada and its Provinces.

This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

*** Section 14 - Transportation Information ***

NOTE: The shipping classification information in this section (Section 14) is meant as a guide to the overall classification of the product. However, transportation classifications may be subject to change with changes in package size. Consult shipper requirements under I.M.O., I.C.A.O. (I.A.T.A.) and 49 CFR to assure regulatory compliance.

US DOT Information

Shipping Name: Not Regulated

Hazard Class: Not Classified

UN/NA #: Not Classified

Packing Group: None

Required Label(s): None

International Air Transport Association (IATA)

For Shipments by Air transport: We classify this product as hazardous (Class 9) when shipped by air because 49 CFR 173.140 (a). "For the purposes of this subchapter, miscellaneous hazardous material (Class 9) means a material which presents a hazard during transportation, but which does not meet the definition of any other hazard class. This class includes: (a) Any material which has an anesthetic, noxious, or other similar property which could cause extreme annoyance or discomfort to a flight crew member so as to prevent the correct performance of assigned duties."

UN: UN 3077

Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (sodium metabisulfite)

Hazard Class: 9

Packing Group: III

Passenger & Cargo Aircraft Packing Instruction: 911

Passenger & Cargo Aircraft Maximum Net Quantity: 400 kg

Limited Quantity Packing Instruction (Passenger & Cargo Aircraft): Y911

Limited Quantity Maximum Net Quantity (Passenger & Cargo Aircraft): 30 kg

Special Provisions: A97 A 149

ERG Code: 9L

International Maritime Organization (I.M.O.) Classification

Sodium Metabisulfite is not regulated under I.M.O.

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

No additional information.

B: Component Analysis

This material does not contain any chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

SARA 302 There are no specific Threshold Planning Quantities for Sodium Metabisulfite. The default Federal MSDS (EHS TPQ) submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

C: SARA 311/312 Tier II Hazard Ratings:

Component	CAS #	Fire Hazard	Reactivity Hazard	Pressure Hazard	Immediate Health Hazard	Chronic Health Hazard
Sodium Metabisulfite	7681-57-4	No	Yes	No	Yes	Yes

Material Safety Data Sheet

Material Name: Sodium Metabisulphite or Sodium Metabisulfite

ID: C1-143

*** Section 15 - Regulatory Information (Continued) ***

US Federal Regulations (continued)

U.S. State Regulations

A: General Product Information

California Proposition 65

Sodium Metabisulfite is not on the California Proposition 65 chemical lists.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substance lists:

Component	CAS #	CA	FL	MA	MN	NJ	PA
Sodium Metabisulfite	7681-57-4	Yes	Yes	Yes	Yes	Yes	No

Other Regulations

A: General Product Information

No other information available.

B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
Sodium Metabisulfite	7681-57-4	Yes	Yes	Yes

C: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Sodium Metabisulfite	7681-57-4	1 percent

ANSI LABELING (Z129.1):

WARNING! MAY BE FATAL IF SWALLOWED. CAUSES SKIN AND EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE ALLERGIC SKIN AND SEVERE RESPIRATORY REACTION. RESPIRATORY REACTIONS MAY BE LIFE-THREATENING. Keep from contact with clothing. Do not taste or swallow. Do not get on skin or in eyes. Avoid breathing dusts or particulates. Avoid prolonged or repeated contact with skin. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Wear gloves, goggles, faceshields, suitable body protection, and NIOSH/MSHA-approved respiratory protection, as appropriate. **FIRST-AID:** In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If inhaled, remove to fresh air. If ingested, do not induce vomiting. Get medical attention. **IN CASE OF FIRE:** Use water fog, dry chemical, CO₂, or "alcohol" foam. **IN CASE OF SPILL:** Absorb spill with inert material. Place residue in suitable container. Consult Material Safety Data Sheet for additional information.

Material Safety Data Sheet

Material Name: Sodium Metabisulphite or Sodium Metabisulfite

ID: C1-143

*** Section 16 - Other Information ***

Other Information

Chem One Ltd. ("Chem One") shall not be responsible for the use of any information, product, method, or apparatus herein presented ("Information"), and you must make your own determination as to its suitability and completeness for your own use, for the protection of the environment, and for health and safety purposes. You assume the entire risk of relying on this Information. In no event shall Chem One be responsible for damages of any nature whatsoever resulting from the use of this product or products, or reliance upon this Information. By providing this Information, Chem One neither can nor intends to control the method or manner by which you use, handle, store, or transport Chem One products. If any materials are mentioned that are not Chem One products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be observed. Chem One makes no representations or warranties, either express or implied of merchantability, fitness for a particular purpose or of any other nature regarding this information, and nothing herein waives any of Chem One's conditions of sale. This information could include technical inaccuracies or typographical errors. Chem One may make improvements and/or changes in the product (s) and/or the program (s) described in this information at any time. If you have any questions, please contact us at Tel. 713-896-9966 or E-mail us at Safety@chemone.com.

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration

Contact: Sue Palmer-Koleman, PhD

Contact Phone: (713) 896-9966

Revision Log

08/28/00 4:23 PM SEP Changed company name, Sect 1 and 16, from Corporation to Ltd.

06/02/01 9:31 AM HDF Checked exposure limits; made changes to Sect 9; overall review, add SARA 311/312 Haz Ratings.

08/20/01 3:20 PM CLJ Add Shipments by Air information to Section 14, Changed contact to Sue, non-800 Chemtrec Num.

02/18/02 11:13 AM HDF Up-date of SARA Hazard Ratings.

11/20/03 11:50 AM HDF General review and up-date of entire MSDS. Up-graded Section 10 Reactivity Information. Up-date of HMIS categories. Up-date of Section 8. Up-date of Section 14.

06/22/05 1:18 pm SEP Updated IATA Section 14

10/22/07 4:23 PM SEP Updated IATA Section 14

This is the end of MSDS # C1-143



Material Safety Data Sheet

Issue Date: 29-APR-2009
Supercedes: 10-NOV-2000

CORTROL OS5010

1 Identification

Identification of substance or preparation
CORTROL OS5010

Product Application Area
Water based dissolved oxygen scavenger/metal passivator.

Company/Undertaking Identification
GE Betz, Inc.
4636 Somerton Road
Trevose, PA 19053
T 215 355-3300, F 215 953 5524

Emergency Telephone
(800) 877-1940

Prepared by Product Stewardship Group: T 215-355-3300 Prepared on: 29-APR-2009

2 Hazard(s) identification

EMERGENCY OVERVIEW

DANGER

Severe irritant to the skin. Absorbed by skin. Potential sensitizer. Corrosive to the eyes. Vapors, gases, mists and/or aerosols cause irritation to the upper respiratory tract.

DOT hazard: Toxic

Odor: Ammonia; Appearance: Colorless To Light Brown, Liquid

Fire fighters should wear positive pressure self-contained breathing apparatus(full face-piece type). Proper fire-extinguishing media: dry chemical, carbon dioxide, foam or water

POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:

Primary route of exposure; Toxic; Severe irritant to the skin.
Absorbed by skin. Potential sensitizer.

ACUTE EYE EFFECTS:

Corrosive to the eyes.

ACUTE RESPIRATORY EFFECTS:

Primary route of exposure; Vapors, gases, mists and/or aerosols

cause irritation to the upper respiratory tract.

INGESTION EFFECTS:

Toxic;

May cause severe irritation or burning of mouth, throat, and gastrointestinal tract with severe chest and abdominal pain, nausea, vomiting, diarrhea, lethargy and collapse. Possible death when ingested in very large doses.

TARGET ORGANS:

Repeated exposure may cause skin sensitization and/or toxicity to the liver, kidney, nervous system, and blood system. Component(s) may cause reproductive toxicity at maternal toxic levels. Limited evidence for increased risk of cancer.

MEDICAL CONDITIONS AGGRAVATED:

Pre-existing skin, liver or kidney disorders.

SYMPTOMS OF EXPOSURE:

Inhalation of vapors/mists/aerosols cause eye, nose, throat and lung irritation. Skin contact may cause redness, itching, dermatitis, or skin sensitization.

3 Composition / information on ingredients

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

Cas#	Chemical Name	Range (w/w%)
302-01-2	HYDRAZINE Corrosive; highly toxic (by skin absorption); toxic (by ingestion); possible human carcinogen (IARC=2B; NTP=anticipated) and liver, kidney, blood or reproductive toxin	30-60

4 First-aid measures

SKIN CONTACT:

URGENT! Wash thoroughly with soap and water. Remove contaminated clothing. Get immediate medical attention. Thoroughly wash clothing before reuse.

EYE CONTACT:

URGENT! Immediately flush eyes with plenty of low-pressure water for at least 20 minutes while removing contact lenses. Hold eyelids apart. Get immediate medical attention.

INHALATION:

Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get immediate medical attention.

INGESTION:

Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Immediately contact physician.

Rinse mouth with plenty of water. Dilute contents of stomach using 4-10 fluid ounces (120-300 mL) of milk or water.

NOTES TO PHYSICIANS:

Material is corrosive. It may not be advisable to induce vomiting. Possible mucosal damage may contraindicate the use of gastric lavage.

5 Fire-fighting measures

FIRE FIGHTING INSTRUCTIONS:

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

EXTINGUISHING MEDIA:

dry chemical, carbon dioxide, foam or water

HAZARDOUS DECOMPOSITION PRODUCTS:

oxides of nitrogen, ammonia

FLASH POINT:

> 200F > 93C P-M(CC)

MISCELLANEOUS:

Toxic

UN 3293; Emergency Response Guide #152

6 Accidental release measures

PROTECTION AND SPILL CONTAINMENT:

Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Isolate spill by diking. Dilute spill to a 5% or less concentration. Neutralize with an equal amount of a 5% or less concentration of a hypochlorite solution.

DISPOSAL INSTRUCTIONS:

Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit. Product as is - Incinerate or land dispose in an approved landfill.

7 Handling and storage

HANDLING:

Basic. Vent slowly before opening. Do not mix with acidic material.

STORAGE:

Keep containers closed when not in use. Store in cool ventilated location. Store away from oxidizers. Shelf life 360 days.

8 Exposure controls / personal protection

EXPOSURE LIMITS

CHEMICAL NAME

HYDRAZINE

PEL (OSHA): 1.0 PPM(SKIN)

TLV (ACGIH): 0.01 PPM(SKIN)-A3

ENGINEERING CONTROLS:

Adequate ventilation to maintain air contaminants below exposure

limits.

PERSONAL PROTECTIVE EQUIPMENT:

Use protective equipment in accordance with 29CFR 1910 Subpart I

RESPIRATORY PROTECTION:

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.

USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS.

An air-supplying respirator (positive pressure full facepiece) may be needed for this product.

SKIN PROTECTION:

gauntlet type butyl or PVC gloves, impervious full body protective suit, rubber boots-- Wash off after each use. Replace as necessary.

EYE PROTECTION:

splash proof chemical goggles, face shield

9 Physical and chemical properties

Specific Grav. (70F, 21C)	1.026	Vapor Pressure (mmHG)	~ 18.0
Freeze Point (F)	< -30	Vapor Density (air=1)	~ 1.00
Freeze Point (C)	< -34		
Viscosity (cps 70F, 21C)	10	% Solubility (water)	100.0
Odor		Ammonia	
Appearance		Colorless To Light Brown	
Physical State		Liquid	
Flash Point	P-M(CC)	> 200F > 93C	
pH 1% Sol. (approx.)		10.5	
Evaporation Rate (Ether=1)		< 1.00	
Percent VOC:		0.0	

NA = not applicable ND = not determined

10 Stability and reactivity

CHEMICAL STABILITY:

Stable under normal storage conditions.

POSSIBILITY OF HAZARDOUS REACTIONS:

No known hazardous reactions.

INCOMPATIBILITIES:

May react with strong oxidizers.

DECOMPOSITION PRODUCTS:

oxides of nitrogen, ammonia

11 Toxicological information

Oral LD50 RAT:	185 mg/kg
Reproductive Toxicity ANIMALS:	
NOTE - Effects only at maternal toxic levels	
Carcinogenicity ANIMALS:	Positive
NOTE - Suspect human carcinogen	
Dermal LD50 RABBIT:	420 mg/kg
Inhalation LC50 RAT:	1,600 ppm/4hr
Non-Ames Mutagenicity :	Positive

12 Ecological information

AQUATIC TOXICOLOGY

No Data Available.

BIODEGRADATION

No Data Available.

13 Disposal considerations

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is :
U133=Hydrazine.

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

14 Transport information

DOT HAZARD: Toxic
PROPER SHIPPING NAME: HYDRAZINE AQUEOUS SOLUTION
6.1, UN 3293, PG III, RQ
DOT EMERGENCY RESPONSE GUIDE #: 152
Note: Some containers may be DOT exempt, please check BOL for exact container classification

15 Regulatory information

TSCA:

All components of this product are included on or are in compliance with the U.S. TSCA regulations.

CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):

0.3 gallons due to HYDRAZINE;

NSF Registered and/or meets USDA (according to 1998 Guidelines):

Registration number: Not Registered

SARA SECTION 312 HAZARD CLASS:

Immediate(acute);Delayed(Chronic)

SARA SECTION 302 CHEMICALS:

CAS#	CHEMICAL NAME
302-01-2	HYDRAZINE

SARA SECTION 313 CHEMICALS:

CAS#	CHEMICAL NAME	RANGE
302-01-2	HYDRAZINE	31.0-40.0%

CALIFORNIA REGULATORY INFORMATION

CALIFORNIA SAFE DRINKING WATER AND TOXIC

ENFORCEMENT ACT (PROPOSITION 65):

This product contains one or more ingredients known to the state of California to cause cancer.

MICHIGAN REGULATORY INFORMATION

CAS#
302-01-2

CHEMICAL NAME
HYDRAZINE

16 Other information

HMIS VII

Health	3	Serious Hazard
Fire	1	Slight Hazard
Reactivity	0	Minimal Hazard
Special	NONE	No special Hazard
(1) Protective Equipment	X	Ask Your Supervisor

CODE TRANSLATION

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
	-----	-----	-----
MSDS status:	26-OCT-2000		** NEW **
	10-NOV-2000	4	26-OCT-2000
	29-APR-2009	4,5,7,10	10-NOV-2000



MATERIAL SAFETY DATA SHEET

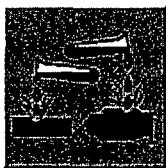
Section 1 - Chemical Product and Company Identification

MSDS Name: Morpholine
Catalog Numbers: AC158680000, AC158680010, AC158680025, AC158680050, AC415160000, AC415160030
Synonyms: 1-Oxa-4-azacyclohexane; Tetrahydro-2H-1,4-oxazine.
Company Identification: Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
For information in the US, call: 201-796-7100
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#: 110-91-8
Chemical Name: Morpholine
%: 99+
EINECS#: 203-815-1

Hazard Symbols: C



Risk Phrases: 10 20/21/22 34

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Flammable liquid and vapor. Hygroscopic (absorbs moisture from the air). Harmful if swallowed, inhaled, or absorbed through the skin. Causes burns by all exposure routes. Target Organs: Blood, kidneys, central nervous system, liver, spleen, lungs, respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye burns. Lachrymator (substance which increases the flow of tears).
Skin: Harmful if absorbed through the skin. Causes skin burns.
Ingestion: Harmful if swallowed. Causes gastrointestinal tract burns. Possible aspiration hazard. May cause lung damage.
Inhalation: Harmful if inhaled. Causes chemical burns to the respiratory tract.
Chronic: May cause liver and kidney damage. Repeated exposure may cause damage to the spleen. Chronic inhalation can cause pneumoconiosis. Adverse reproductive effects have been reported in animals. Laboratory experiments have resulted in mutagenic effects. Chronic exposure may cause blood effects. Exposure to high concentrations may cause central nervous system depression. Animal studies have reported the development of tumors.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Potential for aspiration if swallowed. Get medical aid immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs naturally, have victim lean forward.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to Physician:

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Containers may explode in the heat of a fire. Flammable liquid and vapor.

Extinguishing Media: Use water spray to cool fire-exposed containers. Use foam, dry chemical, or carbon dioxide.

Autoignition Temperature: 255 deg C (491.00 deg F)

Flash Point: 32 deg C (89.60 deg F)

Explosion 2 vol %

Limits: Lower:

Explosion 11.2 vol %

Limits: Upper:

NFPA Rating: health: 3; flammability: 3; instability: 1;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Take precautionary measures against static discharges. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood.

Storage: Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Morpholine	20 ppm; Skin - potential significant contribution to overall exposure by the cutaneous route	20 ppm TWA; 70 mg/m3 TWA 1400 ppm IDLH (10% LEL)	20 ppm TWA; 70 mg/m3 TWA

OSHA Vacated PELs: Morpholine: 20 ppm TWA; 70 mg/m3 TWA

Engineering Controls:

Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: APHA: 15 max
Odor: characteristic odor
pH: Not available
Vapor Pressure: 11 mbar @ 20 deg C
Vapor Density: 3.0 (air=1)
Evaporation Rate: Not available
Viscosity: 2.23 cP @ 20 deg C
Boiling Point: 126 - 130 deg C @ 760 mmHg
Freezing/Melting Point: -5 deg C (23.00°F)
Decomposition Temperature: Not available
Solubility in water: Miscible
Specific Gravity/Density: 0.990
Molecular Formula: C₄H₉NO
Molecular Weight: 87.12

Section 10 - Stability and Reactivity

Chemical Stability: Hygroscopic: absorbs moisture or water from the air.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat, exposure to moist air or water.

Incompatibilities with Other Materials Strong oxidizing agents, acids, aluminum, nitriles (e.g. acetonitrile, methyl cyanide).

Hazardous Decomposition Products Nitrogen oxides, carbon monoxide, carbon dioxide, ammonia.

Hazardous Polymerization Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 110-91-8: QD6475000

LD50/LC50: RTECS:
CAS# 110-91-8: Draize test, rabbit, eye: 2 mg Severe;
Draize test, rabbit, skin: 995 mg/24H Severe;
Inhalation, mouse: LC50 = 1320 mg/m³/2H;
Inhalation, rat: LC50 = 8000 ppm/8H;
Oral, mouse: LD50 = 525 mg/kg;
Oral, rat: LD50 = 1450 mg/kg;
Skin, rabbit: LD50 = 500 uL/kg;

Carcinogenicity: Morpholine - IARC: Group 3 (not classifiable)

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity: Water flea Daphnia: LC50=100.0-119.0mg/L; 24 Hr.; Unspecified
Fish: Bluegill/Sunfish: LC50=350.0mg/L; 96 Hr.; Static conditions, 18-22°C
Bacteria: Phytobacterium phosphoreum: EC50=37mg/L; 30min.; Microtox test

Other: Do not empty into drains.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: MORPHOLINE
Hazard Class: 8
UN Number: UN2054
Packing Group: I
Canada TDG
Shipping Name: MORPHOLINE
Hazard Class: 8
UN Number: UN2054
Packing Group: I

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C

Risk Phrases:

R 10 Flammable.

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R 34 Causes burns.

Safety Phrases:

S 23 Do not inhale gas/fumes/vapour/spray.

S 36 Wear suitable protective clothing.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 110-91-8: 2

Canada

CAS# 110-91-8 is listed on Canada's DSL List

Canadian WHMIS Classifications: B2, D1B, E

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 110-91-8 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 110-91-8 is listed on the TSCA
Inventory.

Section 16 - Other Information

MSDS Creation Date: 6/04/1999

Revision #13 Date 3/07/2008

Revisions were made in Sections: 3, 4, 5, 6, 7, 8, 9, 10, 11, 1

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.



Material Safety Data Sheet

Issue Date: 12-FEB-2009
Supersedes: 10-DEC-2007

SPECTRUS CT1300

1 Identification

Identification of substance or preparation
SPECTRUS CT1300

Product Application Area
Water-based microbial control agent.

Company/Undertaking Identification
GE Betz, Inc.
4636 Somerton Road
Trevose, PA 19053
T 215 355-3300, F 215 953 5524

Emergency Telephone
(800) 877-1940

Prepared by Product Stewardship Group: T 215-355-3300 Prepared on: 12-FEB-2009

2 Hazard(s) identification

EMERGENCY OVERVIEW

DANGER

Corrosive to skin. Potential skin sensitizer. Corrosive to the eyes. Vapors, gases, mists and/or aerosols may cause irritation to upper respiratory tract.

DOT hazard: Corrosive to skin, Flammable
Odor: Mild; Appearance: Colorless To Yellow, Liquid

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type). Proper fire-extinguishing media: dry chemical, carbon dioxide or foam--Avoid water if possible.

POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:

Primary route of exposure; Corrosive to skin. Potential skin sensitizer.

ACUTE EYE EFFECTS:

Corrosive to the eyes.

ACUTE RESPIRATORY EFFECTS:

Vapors, gases, mists and/or aerosols may cause irritation to upper

respiratory tract.

INGESTION EFFECTS:

Toxic;
May cause severe irritation or burning of mouth, throat, and gastrointestinal tract with severe chest and abdominal pain, nausea, vomiting, diarrhea, lethargy and collapse. Possible death when ingested in very large doses.

TARGET ORGANS:

Prolonged or repeated exposures may cause CNS depression, tissue narcosis, skin sensitization, and/or toxicity to the liver and kidney.

MEDICAL CONDITIONS AGGRAVATED:

Not known.

SYMPTOMS OF EXPOSURE:

Inhalation of vapors/mists/aerosols may cause eye, nose, throat and lung irritation. Skin contact may cause severe irritation or burns.

3 Composition / information on ingredients

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

Cas#	Chemical Name	Range (w/w%)
68424-85-1	(C12-16)ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE Corrosive (eyes and skin); toxic (by ingestion)	40-70
64-17-5	ETHYL ALCOHOL Flammable liquid; irritant (eyes); may cause CNS depression; potential liver, kidney, brain, heart and male reproductive toxin; produced mutagenic effects in germ cells and somatic cells (in vivo)	7-13

4 First-aid measures

SKIN CONTACT:

URGENT! Wash thoroughly with soap and water. Remove contaminated clothing. Get immediate medical attention. Thoroughly wash clothing before reuse.

EYE CONTACT:

URGENT! Immediately flush eyes with plenty of low-pressure water for at least 20 minutes while removing contact lenses. Hold eyelids apart. Get immediate medical attention.

INHALATION:

Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get immediate medical attention.

INGESTION:

Do not feed anything by mouth to an unconscious or convulsive

victim. Dilute contents of stomach. Induce vomiting by one of the standard methods. Immediately contact a physician.

NOTES TO PHYSICIANS:

Material is corrosive. It may not be advisable to induce vomiting. Possible mucosal damage may contraindicate the use of gastric lavage.

5 Fire-fighting measures

FIRE FIGHTING INSTRUCTIONS:

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

EXTINGUISHING MEDIA:

dry chemical, carbon dioxide or foam--Avoid water if possible.

HAZARDOUS DECOMPOSITION PRODUCTS:

oxides of carbon and nitrogen, hydrogen chloride

FLASH POINT:

130F 54C P-M(CC)

MISCELLANEOUS:

Corrosive to skin, Flammable

UN 2920;Emergency Response Guide #132

6 Accidental release measures

PROTECTION AND SPILL CONTAINMENT:

Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Remove ignition sources. Flush area with water. Spread sand/grit.

DISPOSAL INSTRUCTIONS:

Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit. Product as is - Dispose of in approved pesticide facility or according to label instructions.

7 Handling and storage

HANDLING:

Combustible. Corrosive to skin and/or eyes.

STORAGE:

Keep containers closed when not in use. Keep away from flames or sparks. Bond containers during filling or discharge when performed at temperatures at or above the product flash point. Shelf life 360 days.

8 Exposure controls / personal protection

EXPOSURE LIMITS

CHEMICAL NAME

(C12-16)ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

ETHYL ALCOHOL

PEL (OSHA): 1,000 PPM
TLV (ACGIH): 1,000 PPM

ENGINEERING CONTROLS:

Adequate ventilation to maintain air contaminants below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Use protective equipment in accordance with 29CFR 1910 Subpart I

RESPIRATORY PROTECTION:

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.

USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS.

If air-purifying respirator use is appropriate, use organic vapor cartridges and any of the following particulate respirators: N95, N99, N100, R95, R99, R100, P95, P99 or P100.

SKIN PROTECTION:

gauntlet-type rubber, butyl or neoprene gloves, chemical resistant apron -- Wash off after each use. Replace as necessary.

EYE PROTECTION:

splash proof chemical goggles, face shield

9 Physical and chemical properties

Specific Grav. (70F, 21C)	0.965	Vapor Pressure (mmHG)	44.0
Freeze Point (F)	-7	Vapor Density (air=1)	< 1.00
Freeze Point (C)	-22		
Viscosity (cps 70F, 21C)	73	% Solubility (water)	100.0
Odor	Mild		
Appearance	Colorless To Yellow		
Physical State	Liquid		
Flash Point	P-M(CC)	130F	54C
pH As Is (approx.)		8.9	
Evaporation Rate (Ether=1)		< 1.00	
Percent VOC:		ND	

NA = not applicable ND = not determined

10 Stability and reactivity

CHEMICAL STABILITY:

Stable under normal storage conditions.

POSSIBILITY OF HAZARDOUS REACTIONS:

INCOMPATIBILITIES:

May react with strong oxidizers.

DECOMPOSITION PRODUCTS:

oxides of carbon and nitrogen, hydrogen chloride

11 Toxicological information

Oral LD50 RAT: 445 mg/kg
Dermal LD50 RABBIT: >1,800 mg/kg
Skin Sensitization G.PIG: NEGATIVE
NOTE - Active component was neither a photoallergen nor a skin sensitizer

12 Ecological information

AQUATIC TOXICOLOGY

Annelida (*Lumbriculus variegatus*) 96 Hour Acute Toxicity
LC50= 1.47; LC10= .37 mg/L
Benthic Crustacean (*Gammarus pseudolimnaeus*) 96 Hour Acute Toxicity
LC50= .07 mg/L
Ceriodaphnia 48 Hour Static Renewal Bioassay
LC50= .35; No Effect Level= .15 mg/L
Ceriodaphnia 7 Day Chronic Bioassay
IC25 = .098 mg/L
Channel Catfish 96 Hour Acute Toxicity
LC50= .86; No Effect Level= .54 mg/L
Daphnia magna 48 Hour Flow-Thru Bioassay
LC50= .04; No Effect Level= .026 mg/L
Daphnia magna 48 Hour Static Acute Bioassay
LC50= .11; No Effect Level= .06 mg/L
Daphnia pulex 48 Hour Static Renewal Bioassay
LC50= .05; No Effect Level= .031 mg/L
Fathead Minnow 7 Day Chronic Bioassay
IC25 = .259 mg/L
Fathead Minnow 96 Hour Flow-Thru Bioassay
LC50= .72; No Effect Level= .41 mg/L
Freshwater Snail (*Physa* sp.) 96 Hour Acute Toxicity
LC50= .46; No Effect Level= .36 mg/L
Menidia beryllina (Silversides) 96 Hour Flow-Thru Bioassay
LC50= .62; No Effect Level= .35 mg/L
Midge larvae (*Chironomus tentans*) 96 Hour Acute Toxicity
LC50= .5; No Effect Level= .13 mg/L
Mysid Shrimp 96 Hour Flow-Thru Bioassay
LC50= .16; No Effect Level= .03 mg/L
Rainbow Trout 96 Hour Flow-Thru Bioassay
LC50= 2; No Effect Level= 1.2 mg/L
Sheepshead Minnow 96 Hour Flow-Thru Bioassay
LC50= 1.76; No Effect Level= 1 mg/L
No Data Available.

BIODEGRADATION

BOD-28 (mg/g): 156
BOD-5 (mg/g): 43
COD (mg/g): 1470
TOC (mg/g): 380

13 Disposal considerations

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is :
Exempt D001 per 40 CFR 261.21(a)(1).

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

14 Transport information

DOT HAZARD: Corrosive to skin, Flammable
PROPER SHIPPING NAME: CORROSIVE LIQUIDS, FLAMMABLE,
N.O.S. (QUATERNARY AMMONIUM COMPOUNDS,
ETHYL ALCOHOL)
8(3), UN 2920, PG II
DOT EMERGENCY RESPONSE GUIDE #: 132
Note: Some containers may be DOT exempt, please check BOL for exact container classification

15 Regulatory information

TSCA:
This is an EPA registered biocide and is exempt from TSCA inventory requirements.
CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):
No regulated constituent present at OSHA thresholds
FIFRA REGISTRATION NUMBER:
3876- 149
FOOD AND DRUG ADMINISTRATION:
21 CFR 176.300 (slimicides for wet end use)
When used in this specified application, all ingredients comprising this product are authorized by FDA for the manufacture of paper and paperboard that may contact aqueous and fatty foods as per 21 CFR 176.170(a)(4).
NSF Registered and/or meets USDA (according to 1998 Guidelines):
Registration number: Not Registered
G5, G7
SARA SECTION 312 HAZARD CLASS:
Immediate(acute);Delayed(Chronic);Fire
SARA SECTION 302 CHEMICALS:
No regulated constituent present at OSHA thresholds
SARA SECTION 313 CHEMICALS:
No regulated constituent present at OSHA thresholds

CALIFORNIA REGULATORY INFORMATION

**CALIFORNIA SAFE DRINKING WATER AND TOXIC
ENFORCEMENT ACT (PROPOSITION 65):**

No regulated constituents present

MICHIGAN REGULATORY INFORMATION

No regulated constituent present at OSHA thresholds

16 Other information

HMIS VII

CODE TRANSLATION

Health	3	Serious Hazard
Fire	2	Moderate Hazard
Reactivity	0	Minimal Hazard
Special	CORR	DOT corrosive
(1) Protective Equipment	D	Goggles, Face Shield, Gloves, Apron

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
	-----	-----	-----
MSDS status:	18-NOV-1997		** NEW **
	27-FEB-1998	15	18-NOV-1997
	15-MAY-1998	2	27-FEB-1998
	20-MAY-1998	11	15-MAY-1998
	17-AUG-1998	15	20-MAY-1998
	27-OCT-1998	;EDIT:9	17-AUG-1998
	12-NOV-1998	;EDIT:9	27-OCT-1998
	03-MAY-2000	12	12-NOV-1998
	05-JUL-2001	12	03-MAY-2000
	24-SEP-2001	3, 4, 5, 7, 8, 14, 16	05-JUL-2001
	16-NOV-2001	12	24-SEP-2001
	30-DEC-2005	13;EDIT:15	16-NOV-2001
	19-DEC-2006	13;EDIT:15	30-DEC-2005
	05-APR-2007	2	19-DEC-2006
	10-DEC-2007	5, 7, 8, 10	05-APR-2007
	12-FEB-2009	12	10-DEC-2007



Material Safety Data Sheet

Issue Date: 17-SEP-2009
Supercedes: 17-APR-2009

SPECTRUS NX1103

1 Identification

Identification of substance or preparation
SPECTRUS NX1103

Product Application Area
Water-based microbial control agent.

Company/Undertaking Identification
GE Betz, Inc.
4636 Somerton Road
Trevose, PA 19053
T 215 355-3300, F 215 953 5524

Emergency Telephone
(800) 877-1940

Prepared by Product Stewardship Group: T 215-355-3300 Prepared on: 17-SEP-2009

2 Hazard(s) identification

EMERGENCY OVERVIEW

DANGER

Corrosive. May be absorbed by skin. Skin sensitizer. Corrosive to the eyes. Vapors, gases, mists and/or aerosols cause irritation to the upper respiratory tract.

DOT hazard: Combustible liquid

Odor: Slight Pungent; Appearance: Yellow, Liquid

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type). Proper fire-extinguishing media: dry chemical/CO2/foam or water--slippery condition; use sand/grit.

POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:

Primary route of exposure; Corrosive. May be absorbed by skin. Skin sensitizer.

ACUTE EYE EFFECTS:

Corrosive to the eyes.

ACUTE RESPIRATORY EFFECTS:

Primary route of exposure; Toxic; Vapors, gases, mists and/or

aerosols cause irritation to the upper respiratory tract.

INGESTION EFFECTS:

May cause severe gastrointestinal irritation.

TARGET ORGANS:

Prolonged or repeated exposures may cause primary irritant dermatitis and/or skin sensitization.

MEDICAL CONDITIONS AGGRAVATED:

Not known.

SYMPTOMS OF EXPOSURE:

Inhalation of vapors/mists/aerosols cause eye, nose, throat and lung irritation. Skin contact may cause redness, itching, dermatitis, or skin sensitization.

3 Composition / information on ingredients

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

Cas#	Chemical Name	Range (w/w%)
13590-97-1	DODECYLGUANIDINE HYDROCHLORIDE (DGH) Corrosive	7-13
6317-18-6	METHYLENE BIS(THIOCYANATE) Corrosive (eyes); toxic (by ingestion); irritant (skin); potential sensitizer (skin)	5-10
67-63-0	2-PROPANOL Flammable liquid; eye and respiratory irritant; CNS depressant; IARC=3 (carcinogen status not classifiable); chronic overexposure may cause liver and kidney toxicity; fetotoxic and developmental	3-7

4 First-aid measures

SKIN CONTACT:

Wash thoroughly with soap and water. Remove contaminated clothing. Thoroughly wash clothing before reuse. Get medical attention if irritation develops or persists.

EYE CONTACT:

URGENT! Immediately flush eyes with plenty of low-pressure water for at least 20 minutes while removing contact lenses. Hold eyelids apart. Get immediate medical attention.

INHALATION:

Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get immediate medical attention.

INGESTION:

Do not feed anything by mouth to an unconscious or convulsive

victim. Do not induce vomiting. Immediately contact physician.
Dilute contents of stomach using 2-8 fluid ounces (60-240 mL) of
milk or water.

NOTES TO PHYSICIANS:

No special instructions

5 Fire-fighting measures

FIRE FIGHTING INSTRUCTIONS:

Fire fighters should wear positive pressure self-contained breathing
apparatus (full face-piece type).

EXTINGUISHING MEDIA:

dry chemical/CO2/foam or water--slippery condition; use sand/grit.

HAZARDOUS DECOMPOSITION PRODUCTS:

oxides of carbon, nitrogen, and sulfur; and hydrogen chloride

FLASH POINT:

120F 49C SETA(CC)

MISCELLANEOUS:

Combustible liquid

NA 1993;Emergency Response Guide #128

6 Accidental release measures

PROTECTION AND SPILL CONTAINMENT:

Ventilate area. Use specified protective equipment. Contain and
absorb on absorbent material. Place in waste disposal container.
Remove ignition sources. Flush area with water. Spread sand/grit.

DISPOSAL INSTRUCTIONS:

Water contaminated with this product may be sent to a sanitary sewer
treatment facility, in accordance with any local agreement, a permitted
waste treatment facility or discharged under a permit. Product
as is - Dispose of in approved pesticide facility or according to
label instructions.

7 Handling and storage

HANDLING:

Combustible. Bond and ground containers during filling or
discharge. Do not use near sparks, flames or sources of ignition.
Corrosive to skin. Corrosive to eyes.

STORAGE:

Shelf life = 180 days. Keep containers closed when not in use.
Store in cool ventilated location. Store away from oxidizers. Keep
away from flames or sparks.

8 Exposure controls / personal protection

EXPOSURE LIMITS

CHEMICAL NAME

DODECYLGUANIDINE HYDROCHLORIDE (DGH)

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

METHYLENE BIS(THIOCYANATE)

PEL (OSHA): NOT DETERMINED
TLV (ACGIH): NOT DETERMINED

2-PROPANOL

PEL (OSHA): 400 PPM
TLV (ACGIH): TWA = 200 PPM; STEL = 400 PPM; A4

ENGINEERING CONTROLS:

Adequate ventilation to maintain air contaminants below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Use protective equipment in accordance with 29CFR 1910 Subpart I

RESPIRATORY PROTECTION:

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.

USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS.

If air-purifying respirator use is appropriate, use a respirator with organic vapor and HEPA cartridges.

SKIN PROTECTION:

gauntlet-type butyl or neoprene gloves, chemical resistant apron -- Wash off after each use. Replace as necessary.

EYE PROTECTION:

splash proof chemical goggles, face shield

9 Physical and chemical properties

Spec. Grav. (70F, 21C)	1.095	Vapor Pressure (mmHG)	24.0
Freeze Point (F)	< -30	Vapor Density (air=1)	> 1.00
Freeze Point (C)	< -34		
Viscosity(cps 70F, 21C)	64	% Solubility (water)	< 1.0
Odor	Slight Pungent		
Appearance	Yellow		
Physical State	Liquid		
Flash Point	SETA(CC)	120F	48C
pH As Is (approx.)	3.2		
Evaporation Rate (Water=1)	< 1.00		
Percent VOC:	4.8		

NA = not applicable ND = not determined

10 Stability and reactivity

CHEMICAL STABILITY:

Stable under normal storage conditions.

POSSIBILITY OF HAZARDOUS REACTIONS:

Friction, heat or other sources of ignition may cause a violent reaction releasing heat and toxic fumes. Contact with oxidizers may cause fire or explosion.

INCOMPATIBILITIES:

May react with strong oxidizers.

DECOMPOSITION PRODUCTS:

oxides of carbon, nitrogen, and sulfur; and hydrogen chloride

11 Toxicological information

Oral LD50 RAT: 668 mg/kg
NOTE - Rat oral LD50: 520 mg/kg in an earlier study
Dermal LD50 RABBIT: >2,000 mg/kg
NOTE - Rabbit Dermal LD50: >16,000 mg/kg in an earlier study
Inhalation LC50 RAT: >2.90 mg/L/hr
NOTE - Maximum achievable concentration
Skin Irritation Score RABBIT: 4.9
NOTE - Skin Irritation Score: 2.46 in an earlier study
Eye Irritation Score RABBIT: 102
NOTE - Irreversible; 21 day test, max.ave. score day 2
Skin Sensitization G.PIG: POSITIVE
NOTE - Magnusson & Kligman method

12 Ecological information

AQUATIC TOXICOLOGY

Bluegill Sunfish 96 Hour Static Acute Bioassay
LC50= 2.7; No Effect Level= 1.5 mg/L
Daphnia magna 48 Hour Static Renewal Bioassay
LC50= .26; No Effect Level= .14 mg/L
Fathead Minnow 96 Hour Static Renewal Bioassay
LC50= 1.1; No Effect Level= .36 mg/L
Rainbow Trout 96 Hour Static Acute Bioassay
LC50= 2.7; No Effect Level= 1.33 mg/L

BIODEGRADATION

BOD-28 (mg/g): 518
BOD-5 (mg/g): 93
COD (mg/g): 1424
TOC (mg/g): 418

13 Disposal considerations

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is :
D001=Ignitable.

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

14 Transport information

DOT HAZARD: Combustible liquid
PROPER SHIPPING NAME: COMBUSTIBLE LIQUID, N.O.S.(ISOPROPYL ALCOHOL SOLUTION)
NA 1993, PG III
DOT EMERGENCY RESPONSE GUIDE #: 128
Note: Some containers may be DOT exempt, please check BOL for exact container classification

15 Regulatory information

TSCA:

This is an EPA registered biocide and is exempt from TSCA inventory requirements.

CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):

No regulated constituent present at OSHA thresholds

FIFRA REGISTRATION NUMBER:

3876- 121

FOOD AND DRUG ADMINISTRATION:

The ingredients in this product are approved by FDA under 21 CFR 176.300.

NSF Registered and/or meets USDA (according to 1998 Guidelines):

Registration number: Not Registered
G5, G7

SARA SECTION 312 HAZARD CLASS:

Immediate(acute);Delayed(Chronic);Fire

SARA SECTION 302 CHEMICALS:

No regulated constituent present at OSHA thresholds

SARA SECTION 313 CHEMICALS:

No regulated constituent present at OSHA thresholds

CALIFORNIA REGULATORY INFORMATION

CALIFORNIA SAFE DRINKING WATER AND TOXIC

ENFORCEMENT ACT (PROPOSITION 65):

This product contains one or more ingredients at trace levels known to the state of California to cause cancer and reproductive toxicity.

MICHIGAN REGULATORY INFORMATION

No regulated constituent present at OSHA thresholds

16 Other information

HMIS VII

CODE TRANSLATION

Health	3	Serious Hazard
Fire	2	Moderate Hazard
Reactivity	0	Minimal Hazard
Special	CORR	DOT corrosive
(1) Protective Equipment	D	Goggles,Face Shield,Gloves,Apron

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
	-----	-----	-----
MSDS status:	03-OCT-1997		** NEW **
	02-DEC-1997	15	03-OCT-1997
	23-DEC-1997	15	02-DEC-1997
	01-JUN-1998	8	23-DEC-1997
	12-JAN-1999	3, 7	01-JUN-1998
	06-APR-1999	1	12-JAN-1999
	22-MAR-2002	4	06-APR-1999
	28-APR-2003	9	22-MAR-2002

07-MAY-2008 4,5,7,10,15
17-APR-2009 3,7,10
17-SEP-2009 2,7,8,10,16

28-APR-2003
07-MAY-2008
17-APR-2009



Material Safety Data Sheet

Issue Date: 17-JUN-2009
Supercedes: 15-MAY-2009

SPECTRUS NX1100

1 Identification

Identification of substance or preparation
SPECTRUS NX1100

Product Application Area
Biocide

Company/Undertaking Identification
GE Betz, Inc.
4636 Somerton Road
Trevose, PA 19053
T 215 355-3300, F 215 953 5524

Emergency Telephone
(800) 877-1940

Prepared by Product Stewardship Group: T 215-355-3300 Prepared on: 17-JUN-2009

2 Hazard(s) identification

EMERGENCY OVERVIEW

DANGER

Corrosive to skin. Skin sensitizer with delayed onset of symptoms.
Corrosive to the eyes. Mists/aerosols cause irritation to the upper
respiratory tract.

DOT hazard: Corrosive to skin/steel
Odor: None; Appearance: Colorless To Yellow Green, Liquid

Fire fighters should wear positive pressure self-contained breathing
apparatus(full face-piece type). Proper fire-extinguishing media:
dry chemical, carbon dioxide, foam or water

POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:

Primary route of exposure; Corrosive to skin. Skin sensitizer with
delayed onset of symptoms.

ACUTE EYE EFFECTS:

Corrosive to the eyes.

ACUTE RESPIRATORY EFFECTS:

Mists/aerosols cause irritation to the upper respiratory tract.

INGESTION EFFECTS:

May cause severe irritation or burning of the gastrointestinal tract.

TARGET ORGANS:

Prolonged or repeated exposures may cause tissue necrosis and/or skin sensitization.

MEDICAL CONDITIONS AGGRAVATED:

Not known.

SYMPTOMS OF EXPOSURE:

Direct contact with skin will cause severe delayed skin reactions or burns if not washed off immediately- follow first aid instructions.

3 Composition / information on ingredients

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

Cas#	Chemical Name	Range (w/w%)
52-51-7	2-BROMO-2-NITROPROPANE-1,3-DIOL Toxic (by ingestion); irritant (eyes); potential sensitizer (skin)	5-10
10377-60-3	MAGNESIUM NITRATE Oxidizer; irritant (eyes and skin)	3-7
26172-55-4	5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE Corrosive; toxic (by ingestion and skin absorption); sensitizer (skin)	1-5
7786-30-3	MAGNESIUM CHLORIDE Potential irritant	1-5

4 First-aid measures

SKIN CONTACT:

URGENT! Wash thoroughly with soap and water. Remove contaminated clothing. Get immediate medical attention. Thoroughly wash clothing before reuse.

EYE CONTACT:

URGENT! Immediately flush eyes with plenty of low-pressure water for at least 20 minutes while removing contact lenses. Hold eyelids apart. Get immediate medical attention.

INHALATION:

Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get immediate medical attention.

INGESTION:

Do not feed anything by mouth to an unconscious or convulsive

victim. Do not induce vomiting. Immediately contact physician.
Dilute contents of stomach using 2-8 fluid ounces (60-240 mL) of milk or water.

NOTES TO PHYSICIANS:

Material is corrosive. It may not be advisable to induce vomiting.
Possible mucosal damage may contraindicate the use of gastric lavage.

5 Fire-fighting measures

FIRE FIGHTING INSTRUCTIONS:

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

EXTINGUISHING MEDIA:

dry chemical, carbon dioxide, foam or water

HAZARDOUS DECOMPOSITION PRODUCTS:

oxides of carbon, nitrogen, and sulfur; hydrogen chloride; and hydrogen bromide

FLASH POINT:

> 200F > 93C P-M(CC)

MISCELLANEOUS:

Corrosive to skin/steel

UN 3265;Emergency Response Guide #153

6 Accidental release measures

PROTECTION AND SPILL CONTAINMENT:

WARNING: Keep spills and clean-up residuals out of municipal sewers and open bodies of water. Adsorb the spill with spill pillows or inert solids such as clay or vermiculite, and transfer contaminated materials to suitable containers for disposal. Deactivate spill area with freshly prepared solution of 5% sodium bicarbonate and 5% sodium hypochlorite in water. Apply solution to the spill area at a ratio of 10 volumes deactivation solution per estimated volume of residual spill to deactivate any residual active ingredient. Let stand for 30 minutes. Flush spill area with copious amounts of water to chemical sewer (if in accordance with local procedures, permits and regulations). DO NOT add deactivation solution to the waste pail to deactivate the adsorbed material.

DISPOSAL INSTRUCTIONS:

Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit. Product as is - Dispose of in approved pesticide facility or according to label instructions.

7 Handling and storage

HANDLING:

Corrosive to skin. Corrosive to eyes.

STORAGE:

Keep containers closed when not in use. Protect from freezing. If frozen, thaw and mix completely prior to use. Shelf life 360 days.

8 Exposure controls / personal protection

EXPOSURE LIMITS

CHEMICAL NAME

2-BROMO-2-NITROPROPANE-1,3-DIOL

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

MAGNESIUM NITRATE

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

MISC: Note-mfg. sugg. exp. limit:0.1 mg/m3 TWA;0.3mg/m3 STEL total isothiazoline).

MAGNESIUM CHLORIDE

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

ENGINEERING CONTROLS:

Adequate ventilation to maintain air contaminants below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Use protective equipment in accordance with 29CFR 1910 Subpart I

RESPIRATORY PROTECTION:

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.

USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS.

If air-purifying respirator use is appropriate, use organic vapor cartridges and any of the following particulate respirators: N95, N99, N100, R95, R99, R100, P95, P99 or P100.

SKIN PROTECTION:

gauntlet-type butyl gloves, chemical resistant apron and boots-- Wash off after each use. Replace as necessary.

EYE PROTECTION:

splash proof chemical goggles, face shield

9 Physical and chemical properties

Specific Grav. (70F,21C)	1.107	Vapor Pressure (mmHG)	~ 18.0
Freeze Point (F)	24	Vapor Density (air=1)	< 1.00
Freeze Point (C)	-4		
Viscosity(cps 70F,21C)	10	% Solubility (water)	100.0
Odor	None		
Appearance	Colorless To Yellow Green		
Physical State	Liquid		
Flash Point	P-M(CC)	> 200F > 93C	
pH As Is (approx.)	3.0		
Evaporation Rate (Ether=1)	< 1.00		
Percent VOC:	0.0		

NA = not applicable ND = not determined

10 Stability and reactivity

CHEMICAL STABILITY:

Stable under normal storage conditions.

POSSIBILITY OF HAZARDOUS REACTIONS:

Contact with strong bases may cause a violent reaction releasing heat.

INCOMPATIBILITIES:

May react with strong reducing agents.

DECOMPOSITION PRODUCTS:

oxides of carbon, nitrogen, and sulfur; hydrogen chloride; and hydrogen bromide

11 Toxicological information

Oral LD50 RAT:	1,030 mg/kg
Dermal LD50 RABBIT:	>2,000 mg/kg
Skin Irritation Score RABBIT:	CORROSIVE
Eye Irritation Score RABBIT:	CORROSIVE
Skin Sensitization G.PIG:	NEGATIVE

12 Ecological information

AQUATIC TOXICOLOGY

Ceriodaphnia 48 Hour Static Renewal Bioassay

LC50= 4.7; No Effect Level= .63 mg/L

Daphnia magna 48 Hour Static Renewal Bioassay

LC50= 5; No Effect Level= 2.5 mg/L

Fathead Minnow 96 Hour Static Renewal Bioassay

LC50= 3.5; No Effect Level= 1.8 mg/L

Mysid Shrimp 48 Hour Static Renewal Bioassay

LC50= 40.5; No Effect Level= 18 mg/L

Sheepshead Minnow 96 Hour Static Renewal Bioassay

LC50= 26.7; No Effect Level= 15.5 mg/L

BIODEGRADATION

BOD-28 (mg/g): 4

BOD-5 (mg/g): 2

COD (mg/g): 78

TOC (mg/g): 29

13 Disposal considerations

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is :
D002=Corrosive(steel).

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

14 Transport information

DOT HAZARD: Corrosive to skin/steel
PROPER SHIPPING NAME: CORROSIVE LIQUID, ACIDIC, ORGANIC,
N.O.S. (5-CHLORO-2-METHYL-4-ISOTHIAZOLIN
-3-ONE)
8, UN 3265, PG II
DOT EMERGENCY RESPONSE GUIDE #: 153
Note: Some containers may be DOT exempt, please check BOL for
exact container classification

15 Regulatory information

TSCA:

This is an EPA registered biocide and is exempt from TSCA
inventory requirements.

CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):

No regulated constituent present at OSHA thresholds

FIFRA REGISTRATION NUMBER:

3876- 151

FOOD AND DRUG ADMINISTRATION:

21 CFR 176.300 & 176.170 (slimicides and as a preservative)
When used in this specified application, all ingredients
comprising this product are authorized by FDA for the
manufacture of paper and paperboard that may contact aqueous
and fatty foods as per 21 CFR 176.170(a)(4).

NSF Registered and/or meets USDA (according to 1998 Guidelines):

Registration number: 141064

Category Code(s):

- G5 Cooling and retort water treatment products - all
food processing areas
- G7 Boiler treatment products - all food processing
areas/nonfood contact

SARA SECTION 312 HAZARD CLASS:

Immediate(acute);Delayed(Chronic)

SARA SECTION 302 CHEMICALS:

No regulated constituent present at OSHA thresholds

SARA SECTION 313 CHEMICALS:

CAS#	CHEMICAL NAME	RANGE
10377-60-3	MAGNESIUM NITRATE	2.0-5.0%

CALIFORNIA REGULATORY INFORMATION

CALIFORNIA SAFE DRINKING WATER AND TOXIC

ENFORCEMENT ACT (PROPOSITION 65):

No regulated constituents present

MICHIGAN REGULATORY INFORMATION

No regulated constituent present at OSHA thresholds

16 Other information

HMIS vII

CODE TRANSLATION

Health	3	Serious Hazard
Fire	0	Minimal Hazard
Reactivity	0	Minimal Hazard
Special	CORR	DOT corrosive
(1) Protective Equipment	D	Goggles, Face Shield, Gloves, Apron

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
	-----	-----	-----
MSDS status:	24-SEP-1997		** NEW **
	26-FEB-1998	12	24-SEP-1997
	20-MAY-1998	15	26-FEB-1998
	22-MAY-1998	2	20-MAY-1998
	07-JUL-1998	12	22-MAY-1998
	15-DEC-1998	7	07-JUL-1998
	01-APR-1999	12	15-DEC-1998
	05-NOV-1999	12	01-APR-1999
	11-MAY-2001	4	05-NOV-1999
	17-JAN-2002	10	11-MAY-2001
	12-OCT-2004	15	17-JAN-2002
	17-NOV-2004	15	12-OCT-2004
	14-JUN-2005	3,9	17-NOV-2004
	04-JAN-2007	2,5,7,10	14-JUN-2005
	25-JAN-2007	5,9,13	04-JAN-2007
	22-MAR-2007	5,9,13	25-JAN-2007
	29-JUN-2007	6,8,16	22-MAR-2007
	02-JUL-2008	4,8	29-JUN-2007
	15-MAY-2009	15	02-JUL-2008
	17-JUN-2009	15	15-MAY-2009



Material Safety Data Sheet

Issue Date: 10-DEC-2007
Supercedes: 03-APR-2007

FOAMTROL AF1440

1 Identification of Product and Company

Identification of substance or preparation
FOAMTROL AF1440

Product Application Area
Antifoam.

Company/Undertaking Identification
GE Betz, Inc.
4636 Somerton Road
Trevose, PA 19053
T 215 355-3300, F 215 953 5524

Emergency Telephone
(800) 877-1940

Prepared by Product Stewardship Group: 215 355-3300

2 Composition / Information On Ingredients

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

Cas#	Chemical Name	Range (w/w%)
64741-44-2	DISTILLATES, PETROLEUM, STRAIGHT-RUN MIDDLE similar petroleum oils have been shown to cause skin tumors in laboratory animals following lifetime exposure without washing or removal.	60-100

3 Hazards Identification

EMERGENCY OVERVIEW

CAUTION

May cause slight irritation to the skin. May cause dermatitis. May cause moderate irritation to the eyes. Moderate, prolonged exposure may cause headache. May cause chemical pneumonitis if aspirated into lungs.

DOT hazard is not applicable
Odor: Hydrocarbon; Appearance: Amber, Liquid

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type). Proper fire-extinguishing media: dry chemical, carbon dioxide, foam or water

POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:

Primary route of exposure; May cause slight irritation to the skin. May cause dermatitis.

ACUTE EYE EFFECTS:

May cause moderate irritation to the eyes.

ACUTE RESPIRATORY EFFECTS:

Moderate, prolonged exposure may cause headache. May cause chemical pneumonitis if aspirated into lungs.

INGESTION EFFECTS:

May cause gastrointestinal irritation with possible nausea, vomiting, abdominal discomfort and diarrhea. Small amounts aspirated during ingestion or vomiting may cause lung injury, possibly leading to death.

TARGET ORGANS:

Prolonged or repeated exposures may cause defatting-type dermatitis. Lifetime skin painting studies in mice have produced skin tumors.

MEDICAL CONDITIONS AGGRAVATED:

Not known.

SYMPTOMS OF EXPOSURE:

Prolonged exposure may cause drying and cracking of skin.

4 First Aid Measures

SKIN CONTACT:

Wash thoroughly with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

EYE CONTACT:

Remove contact lenses. Hold eyelids apart. Immediately flush eyes with plenty of low-pressure water for at least 15 minutes. Get immediate medical attention.

INHALATION:

If nasal, throat or lung irritation develops - remove to fresh air and get medical attention.

INGESTION:

Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Immediately contact physician. Dilute contents of stomach using 2-8 fluid ounces (60-240 mL) of milk or water.

NOTES TO PHYSICIANS:

This product contains a hydrocarbon solvent. Aspiration into the lungs will result in chemical pneumonia and may be fatal.

5 Fire Fighting Measures

FIRE FIGHTING INSTRUCTIONS:

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

EXTINGUISHING MEDIA:

dry chemical, carbon dioxide, foam or water

HAZARDOUS DECOMPOSITION PRODUCTS:

oxides of carbon

FLASH POINT:

> 200F > 93C P-M(CC)

6 Accidental Release Measures

PROTECTION AND SPILL CONTAINMENT:

Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Flush area with water. Wet area may be slippery. Spread sand/grit.

DISPOSAL INSTRUCTIONS:

Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit. Product as is - Incinerate or land dispose in an approved landfill.

7 Handling & Storage

HANDLING:

Vent carefully before opening.

STORAGE:

Keep containers closed when not in use. Store between 90-110F (32-43C) to prevent crystallization. If storage is below 90F (32C), warm and mix prior to use to ensure homogeneity. Store away from oxidizers.

8 Exposure Controls / Personal Protection

EXPOSURE LIMITS**CHEMICAL NAME**

DISTILLATES, PETROLEUM, STRAIGHT-RUN MIDDLE

PEL (OSHA): 5 MG/M3

TLV (ACGIH): 5 MG/M3

ENGINEERING CONTROLS:

Adequate ventilation to maintain air contaminants below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Use protective equipment in accordance with 29CFR 1910 Subpart I

RESPIRATORY PROTECTION:

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.

USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS.

If air-purifying respirator use is appropriate, use organic vapor cartridges and any of the following particulate respirators: R95, R99, R100, P95, P99 or P100.

SKIN PROTECTION:

viton gloves-- Wash off after each use. Replace as necessary.
EYE PROTECTION:
splash proof chemical goggles

9 Physical & Chemical Properties

Specific Grav. (70F, 21C)	0.867	Vapor Pressure (mmHG)	< 1.0
Freeze Point (F)	18	Vapor Density (air=1)	> 1.00
Freeze Point (C)	-8		
Viscosity (cps 70F, 21C)	11	% Solubility (water)	0.0
Odor		Hydrocarbon	
Appearance		Amber	
Physical State		Liquid	
Flash Point	P-M(CC)	> 200F > 93C	
pH 5% Emulsion (approx.)		5.6	
Evaporation Rate (Ether=1)		< 1.00	
Percent VOC:		53.9	

NA = not applicable ND = not determined

10 Stability & Reactivity

STABILITY:

Stable under normal storage conditions.

HAZARDOUS POLYMERIZATION:

Will not occur.

INCOMPATIBILITIES:

May react with strong oxidizers.

DECOMPOSITION PRODUCTS:

oxides of carbon

INTERNAL PUMPOUT/CLEANOUT CATEGORIES:

"B"

11 Toxicological Information

Oral LD50 RAT:	>2,000 mg/kg
NOTE - Estimated value	
Dermal LD50 RABBIT:	>2,000 mg/kg

12 Ecological Information

AQUATIC TOXICOLOGY

Daphnia magna 48 Hour Static Acute Bioassay

LC50= 98.2; No Effect Level= 37 mg/L

Rainbow Trout 96 Hour Static Acute Bioassay

LC50= 100; No Effect Level= 75 mg/L

BIODEGRADATION

BOD-28 (mg/g): 285

BOD-5 (mg/g): 138

COD (mg/g): 1486

TOC (mg/g): 500

13 Disposal Considerations

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is :
Not applicable.

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

14 Transport Information

DOT HAZARD: Not Applicable

PROPER SHIPPING NAME:

DOT EMERGENCY RESPONSE GUIDE #: Not applicable

Note: Some containers may be DOT exempt, please check BOL for exact container classification

15 Regulatory Information

TSCA:

All components of this product are included on or are in compliance with the U.S. TSCA regulations.

CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):

Treat as oil spill

FOOD AND DRUG ADMINISTRATION:

21 CFR 176.210 (defoaming agents used in the manufacture of paper and paperboard)

When used in this specified application, all ingredients comprising this product are authorized by FDA for the manufacture of paper and paperboard that may contact aqueous and fatty foods as per 21 CFR 176.170(a)(4).

USDA FOOD PLANT APPROVALS:

SEC.G7,L1

SARA SECTION 312 HAZARD CLASS:

Immediate(acute);Delayed(Chronic)

SARA SECTION 302 CHEMICALS:

No regulated constituent present at OSHA thresholds

SARA SECTION 313 CHEMICALS:

No regulated constituent present at OSHA thresholds

CALIFORNIA REGULATORY INFORMATION

CALIFORNIA SAFE DRINKING WATER AND TOXIC

ENFORCEMENT ACT (PROPOSITION 65):

This product contains one or more ingredients at trace levels known to the state of California to cause cancer and reproductive toxicity.

MICHIGAN REGULATORY INFORMATION

No regulated constituent present at OSHA thresholds

16 Other Information

NFPA/HMIS

CODE TRANSLATION

Health	1	Slight Hazard
Fire	1	Slight Hazard
Reactivity	0	Minimal Hazard
Special	NONE	No special Hazard
(1) Protective Equipment	B	Goggles, Gloves

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
	-----	-----	-----
MSDS status:	29-JAN-1997		** NEW **
	01-JUL-1997	15	29-JAN-1997
	30-APR-1998	;EDIT:9	01-JUL-1997
	09-MAR-2000	15	30-APR-1998
	20-SEP-2000	2,15	09-MAR-2000
	06-OCT-2000	3,4	20-SEP-2000
	06-MAY-2003	4	06-OCT-2000
	03-APR-2007	3,8,15	06-MAY-2003
	10-DEC-2007	4,5,8,10	03-APR-2007



Material Safety Data Sheet

Issue Date: 24-APR-2007
Supercedes: 24-APR-2007

DIANODIC DN2142

1 Identification of Product and Company

Identification of substance or preparation
DIANODIC DN2142

Product Application Area
Water-based corrosion inhibitor/deposit control agent.

Company/Undertaking Identification
GE Betz, Inc.
4636 Somerton Road
Trevose, PA 19053
T 215 355-3300, F 215 953 5524

Emergency Telephone
(800) 877-1940

Prepared by Product Stewardship Group: 215 355-3300

2 Composition / Information On Ingredients

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

Cas#	Chemical Name	Range (w/w%)
7778-53-2	PHOSPHORIC ACID, TRIPOTASSIUM SALT Severe irritant (eyes)	10-20
1310-58-3	POTASSIUM HYDROXIDE (CAUSTIC POTASH) Corrosive; toxic (by ingestion)	1-5

3 Hazards Identification

EMERGENCY OVERVIEW

DANGER

May cause moderate irritation to the skin. Corrosive to the eyes.
Mists/aerosols may cause irritation to upper respiratory tract.

DOT hazard: Corrosive to aluminum, RQ
Odor: Slight; Appearance: Light Yellow To Amber, Liquid

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type). Proper fire-extinguishing media: dry chemical, carbon dioxide, foam or water

POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:

Primary route of exposure; May cause moderate irritation to the skin.

ACUTE EYE EFFECTS:

Corrosive to the eyes.

ACUTE RESPIRATORY EFFECTS:

Mists/aerosols may cause irritation to upper respiratory tract.

INGESTION EFFECTS:

May cause gastrointestinal irritation with possible nausea, vomiting, abdominal discomfort and diarrhea.

TARGET ORGANS:

No evidence of potential chronic effects.

MEDICAL CONDITIONS AGGRAVATED:

Not known.

SYMPTOMS OF EXPOSURE:

May cause redness or itching of skin, irritation, and/or tearing of eyes (direct contact).

4 First Aid Measures

SKIN CONTACT:

Wash thoroughly with soap and water. Remove contaminated clothing. Thoroughly wash clothing before reuse. Get medical attention if irritation develops or persists.

EYE CONTACT:

URGENT! Immediately flush eyes with plenty of low-pressure water for at least 20 minutes while removing contact lenses. Hold eyelids apart. Get immediate medical attention.

INHALATION:

If nasal, throat or lung irritation develops - remove to fresh air and get medical attention.

INGESTION:

Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Immediately contact physician. Dilute contents of stomach using 3-4 glasses milk or water.

NOTES TO PHYSICIANS:

No special instructions

5 Fire Fighting Measures

FIRE FIGHTING INSTRUCTIONS:

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

EXTINGUISHING MEDIA:

dry chemical, carbon dioxide, foam or water

HAZARDOUS DECOMPOSITION PRODUCTS:

oxides of carbon, phosphorus and sulfur

FLASH POINT:

> 200F > 93C P-M(CC)

MISCELLANEOUS:

Corrosive to aluminum, RQ

UN 3266; Emergency Response Guide #154

6 Accidental Release Measures

PROTECTION AND SPILL CONTAINMENT:

Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Flush area with water. Wet area may be slippery. Spread sand/grit.

DISPOSAL INSTRUCTIONS:

Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit. Product as is - Incinerate or land dispose in an approved landfill.

7 Handling & Storage

HANDLING:

Alkaline. Do not mix with acidic material.

STORAGE:

Keep containers closed when not in use. Do not freeze. If frozen, thaw and mix completely prior to use.

8 Exposure Controls / Personal Protection

EXPOSURE LIMITS**CHEMICAL NAME****PHOSPHORIC ACID, TRIPOTASSIUM SALT**

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

POTASSIUM HYDROXIDE (CAUSTIC POTASH)

PEL (OSHA): 2 MG/M3 (CEILING)

TLV (ACGIH): 2 MG/M3 (CEILING)

ENGINEERING CONTROLS:

Adequate ventilation to maintain air contaminants below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Use protective equipment in accordance with 29CFR 1910 Subpart I

RESPIRATORY PROTECTION:

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.

USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS.

If air-purifying respirator use is appropriate, use a respirator with dust/mist filters.

SKIN PROTECTION:

rubber, butyl or neoprene gloves -- Wash off after each use.
Replace as necessary.

EYE PROTECTION:

splash proof chemical goggles

9 Physical & Chemical Properties

Specific Grav. (70F, 21C)	1.274	Vapor Pressure (mmHG)	~ 18.0
Freeze Point (F)	10	Vapor Density (air=1)	< 1.00
Freeze Point (C)	-12		
Viscosity (cps 70F, 21C)	27	% Solubility (water)	100.0

Odor	Slight
Appearance	Light Yellow To Amber
Physical State	Liquid
Flash Point	P-M(CC) > 200F > 93C
pH 5% Sol. (approx.)	12.2
Evaporation Rate (Ether=1)	< 1.00
Percent VOC:	0.0

NA = not applicable ND = not determined

10 Stability & Reactivity

STABILITY:

Stable under normal storage conditions.

HAZARDOUS POLYMERIZATION:

Will not occur.

INCOMPATIBILITIES:

May react with strong oxidizers.

DECOMPOSITION PRODUCTS:

oxides of carbon, phosphorus and sulfur

INTERNAL PUMPOUT/CLEANOUT CATEGORIES:

"B"

11 Toxicological Information

Oral LD50 RAT:	>5,000 mg/kg
NOTE - Estimated value	
Dermal LD50 RABBIT:	>5,000 mg/kg
NOTE - Estimated value	

12 Ecological Information

AQUATIC TOXICOLOGY

Daphnia magna 48 Hour Acute Toxicity (Estimated)

LC50= 1850; No Effect Level= 940 mg/L

Fathead Minnow 96 Hour Acute Toxicity (Estimated)

LC50= 2120; No Effect Level= 520 mg/L

BIODEGRADATION

BOD-28 (mg/g): 12

BOD-5 (mg/g): 4

COD (mg/g): 148

TOC (mg/g): 57

13 Disposal Considerations

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is :
Not applicable.

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

14 Transport Information

DOT HAZARD: Corrosive to aluminum, RQ
PROPER SHIPPING NAME: CORROSIVE LIQUID, BASIC, INORGANIC,
N.O.S. (POTASSIUM HYDROXIDE)
8, UN 3266 PG III RQ

DOT EMERGENCY RESPONSE GUIDE #: 154

Note: Some containers may be DOT exempt, please check BOL for exact container classification

15 Regulatory Information

TSCA:

All components of this product are listed in the TSCA inventory.

CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):

3,174 gallons due to POTASSIUM HYDROXIDE (CAUSTIC POTASH);

SARA SECTION 312 HAZARD CLASS:

Immediate(acute)

SARA SECTION 302 CHEMICALS:

No regulated constituent present at OSHA thresholds

SARA SECTION 313 CHEMICALS:

No regulated constituent present at OSHA thresholds

CALIFORNIA REGULATORY INFORMATION

CALIFORNIA SAFE DRINKING WATER AND TOXIC

ENFORCEMENT ACT (PROPOSITION 65):

No regulated constituents present

MICHIGAN REGULATORY INFORMATION

No regulated constituent present at OSHA thresholds

16 Other Information

NFPA/HMIS

CODE TRANSLATION

Health	3	Serious Hazard
Fire	1	Slight Hazard
Reactivity	0	Minimal Hazard
Special	ALK	pH above 12.0
(1) Protective Equipment	B	Goggles, Gloves

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
MSDS status: 29-JAN-1997		** NEW **
25-APR-1997	3, 5, 14	29-JAN-1997

25-NOV-1997 2,8
13-JAN-1998 2,8
24-JUL-1998 2,8
14-JAN-2003 2,4,8,15
27-APR-2004 2
08-MAR-2006 15
24-APR-2007 5,8,10,14

25-APR-1997
25-NOV-1997
13-JAN-1998
24-JUL-1998
14-JAN-2003
27-APR-2004
08-MAR-2006



Material Safety Data Sheet

Issue Date: 24-JUN-2009
Supersedes: 24-JUL-2008

SPECTRUS OX903

1 Identification

Identification of substance or preparation
SPECTRUS OX903

Product Application Area
Solid microbial control agent.

Company/Undertaking Identification
GE Betz, Inc.
4636 Somerton Road
Trevose, PA 19053
T 215 355-3300, F 215 953 5524

Emergency Telephone
(800) 877-1940

Prepared by Product Stewardship Group: T 215-355-3300 Prepared on: 24-JUN-2009

2 Hazard(s) identification

EMERGENCY OVERVIEW

DANGER

May cause moderate irritation to the skin. Potential skin sensitizer. Corrosive to the eyes. Mists/aerosols cause irritation to the upper respiratory tract.

DOT hazard: Toxic
Odor: Mild; Appearance: White, Powder

Fire fighters should wear positive pressure self-contained breathing apparatus(full face-piece type). Proper fire-extinguishing media: dry chemical, carbon dioxide, foam or water

POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:

Primary route of exposure; May cause moderate irritation to the skin. Potential skin sensitizer.

ACUTE EYE EFFECTS:

Corrosive to the eyes.

ACUTE RESPIRATORY EFFECTS:

Primary route of exposure; Highly Toxic; Mists/aerosols cause

irritation to the upper respiratory tract.

INGESTION EFFECTS:

Toxic;
May cause severe irritation or burning of mouth, throat, and gastrointestinal tract with severe chest and abdominal pain, nausea, vomiting, diarrhea, lethargy and collapse. Possible death when ingested in very large doses.

TARGET ORGANS:

Repeated skin contact may cause sensitization.

MEDICAL CONDITIONS AGGRAVATED:

Not known.

SYMPTOMS OF EXPOSURE:

Causes redness or itching of skin, possibly leading to burns (dependent on the length of exposure).

3 Composition / information on ingredients

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

Cas#	Chemical Name	Range (w/w%)
10222-01-2	DBNPA (2,2-DIBROMO-3-NITRILOPROPIONAMIDE) Corrosive (eyes); highly toxic (by inhalation); toxic (by ingestion); potential sensitizer	60-100

4 First-aid measures

SKIN CONTACT:

Wash thoroughly with soap and water for at least 15 minutes.
Remove contaminated clothing. Thoroughly wash clothing before reuse. Get immediate medical attention.

EYE CONTACT:

URGENT! Immediately flush eyes with plenty of low-pressure water for at least 20 minutes while removing contact lenses. Hold eyelids apart. Get immediate medical attention.

INHALATION:

Remove to fresh air. Apply necessary first aid treatment.
Immediately contact a physician.

INGESTION:

Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Immediately contact physician. Wash mouth with water. Do not give water to drink.

NOTES TO PHYSICIANS:

Material is corrosive. It may not be advisable to induce vomiting. Possible mucosal damage may contraindicate the use of gastric lavage.

5 Fire-fighting measures

FIRE FIGHTING INSTRUCTIONS:

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

EXTINGUISHING MEDIA:

dry chemical, carbon dioxide, foam or water

HAZARDOUS DECOMPOSITION PRODUCTS:

elemental oxides

FLASH POINT:

> 200F > 93C P-M(CC)

MISCELLANEOUS:

Toxic

UN 2811;Emergency Response Guide #154

6 Accidental release measures

PROTECTION AND SPILL CONTAINMENT:

Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Flush area with water. Spread sand/grit. Neutralize with soda ash.

DISPOSAL INSTRUCTIONS:

Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit. Product as is - Dispose of in approved pesticide facility or according to label instructions.

7 Handling and storage

HANDLING:

Corrosive to eyes.

STORAGE:

Keep containers closed when not in use. Keep dry. Store below 140F (60C). Store away from reducing agents and oxidizers.

8 Exposure controls / personal protection

EXPOSURE LIMITS

CHEMICAL NAME

DBNPA (2,2-DIBROMO-3-NITRILOPROPIONAMIDE)

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

MISC: Note- manufacturer's recommended exposure limit: 2 mg/m3(ceiling)-for powder.

ENGINEERING CONTROLS:

Adequate ventilation to maintain air contaminants below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Use protective equipment in accordance with 29CFR 1910 Subpart I

RESPIRATORY PROTECTION:

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER

WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.
USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED
WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS.
If air-purifying respirator use is appropriate, use a
respirator with organic vapor/acid gas cartridges and
dust/mist prefilters.

SKIN PROTECTION:

butyl gloves-- Wash off after each use. Replace as necessary.

EYE PROTECTION:

airtight chemical goggles

9 Physical and chemical properties

Density	NO DATA	Vapor Pressure (mmHG)	< 0.1
Freeze Point (F)	NA	Vapor Density (air=1)	< 1.00
Freeze Point (C)	NA		
Viscosity(cps 70F,21C)	NA	% Solubility (water)	1.5
Odor		Mild	
Appearance		White	
Physical State		Powder	
Flash Point	P-M(CC)	> 200F > 93C	
pH 1.5% Solution (approx.)		6.8	
Evaporation Rate (Ether=1)		< 1.00	
Percent VOC:		0.0	

NA = not applicable ND = not determined

10 Stability and reactivity

CHEMICAL STABILITY:

Stable under normal storage conditions.

POSSIBILITY OF HAZARDOUS REACTIONS:

No known hazardous reactions.

INCOMPATIBILITIES:

Above 120 deg. C bromine, cyanogen bromide and dibromoacetonitrile
are formed. May react with bases or strong oxidizers.

DECOMPOSITION PRODUCTS:

elemental oxides

11 Toxicological information

Oral LD50 RAT:	308 mg/kg
Dermal LD50 RAT:	>2000 mg/kg
Inhalation LC50 RAT:	0.32 mg/l/4hour

12 Ecological information

AQUATIC TOXICOLOGY

Bluegill Sunfish 96 Hour Static Acute Bioassay

LC50= 32.5 mg/L

Daphnia magna 21 Day Flow-Thru Life-Cycle Chronic Bioassay

Reproduction EC50= 3.25; Reproduction NOEL= 1.75 mg/L

Daphnia magna 48 Hour Static Renewal Bioassay
LC50= 16.5; No Effect Level= 10.75 mg/L
Fathead Minnow 96 Hour Static Renewal Bioassay
LC50= 43.5; No Effect Level= 15.5 mg/L
Rainbow Trout 96 Hour Static Acute Bioassay
LC50= 11.5; No Effect Level= 9 mg/L
Sheepshead Minnow 96 Hour Static Acute Bioassay
LC50= 35 mg/L

BIODEGRADATION

No Data Available.

13 Disposal considerations

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is :
Not applicable.

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

14 Transport information

DOT HAZARD:	Toxic
PROPER SHIPPING NAME:	TOXIC SOLID, ORGANIC, N.O.S. (2,2-DIBROMO-3-NITRO ILOPROPIONAMIDE) 6.1, UN2811, PG II

DOT EMERGENCY RESPONSE GUIDE #: 154

Note: Some containers may be DOT exempt, please check BOL for exact container classification

15 Regulatory information

TSCA:

This is an EPA registered biocide and is exempt from TSCA inventory requirements.

CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):

No regulated constituent present at OSHA thresholds

FIFRA REGISTRATION NUMBER:

8622-56-3876

NSF Registered and/or meets USDA (according to 1998 Guidelines):

Registration number: 140721

Category Code(s):

- G5 Cooling and retort water treatment products - all food processing areas
- G7 Boiler treatment products - all food processing areas/nonfood contact

SARA SECTION 312 HAZARD CLASS:

Immediate(acute);Delayed(Chronic);Reactive

SARA SECTION 302 CHEMICALS:

No regulated constituent present at OSHA thresholds

SARA SECTION 313 CHEMICALS:

No regulated constituent present at OSHA thresholds

CALIFORNIA REGULATORY INFORMATION

CALIFORNIA SAFE DRINKING WATER AND TOXIC
ENFORCEMENT ACT (PROPOSITION 65):
No regulated constituents present
MICHIGAN REGULATORY INFORMATION

No regulated constituent present at OSHA thresholds

16 Other information

HMIS VII

CODE TRANSLATION

Health	3	Serious Hazard
Fire	1	Slight Hazard
Reactivity	1	Slight Hazard
Special	NONE	No special Hazard
(1) Protective Equipment	B	Goggles, Gloves

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
	-----	-----	-----
MSDS status:	23-JAN-2001		** NEW **
	23-MAR-2001	15	23-JAN-2001
	10-AUG-2001	15	23-MAR-2001
	24-SEP-2002	15	10-AUG-2001
	21-OCT-2002	12	24-SEP-2002
	20-NOV-2003	15	21-OCT-2002
	24-JUL-2008	11	20-NOV-2003
	24-JUN-2009	10, 15	24-JUL-2008



Material Safety Data Sheet

Issue Date: 18-JUN-2009
Supersedes: 28-MAY-2009

CONTINUUM AT901

1 Identification

Identification of substance or preparation
CONTINUUM AT901

Product Application Area
Solid corrosion inhibitor/deposit control agent

Company/Undertaking Identification
GE Betz, Inc.
4636 Somerton Road
Trevose, PA 19053
T 215 355-3300, F 215 953 5524

Emergency Telephone
(800) 877-1940

Prepared by Product Stewardship Group: T 215-355-3300 Prepared on: 18-JUN-2009

2 Hazard(s) identification

EMERGENCY OVERVIEW

CAUTION

May cause moderate irritation to the skin. Corrosive to the eyes.
Dusts may cause irritation to the upper respiratory tract.

DOT hazard is not applicable.
Odor: Slight; Appearance: Yellow To Brown, Solid

Fire fighters should wear positive pressure self-contained breathing apparatus(full face-piece type). Proper fire-extinguishing media:
dry chemical, carbon dioxide, foam or water

POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:

Primary route of exposure; May cause moderate irritation to the skin.

ACUTE EYE EFFECTS:

Corrosive to the eyes.

ACUTE RESPIRATORY EFFECTS:

Primary route of exposure;Dusts may cause irritation to the upper respiratory tract.

INGESTION EFFECTS:

May cause gastrointestinal irritation.

TARGET ORGANS:

Prolonged or repeated exposures may cause toxicity to the nervous system and lung.

MEDICAL CONDITIONS AGGRAVATED:

Not known.

SYMPTOMS OF EXPOSURE:

Inhalation of dust and/or vapors may cause eye, nose, throat and respiratory tract irritation.

3 Composition / information on ingredients

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

Cas#	Chemical Name	Range(w/w%)
7601-54-9	TRISODIUM PHOSPHATE (SODIUM PHOSPHATE,TRIBASIC) Irritant (eyes)	7-13
15217-42-2	1-H-BENZOTRIAZOLE, SODIUM SALT Irritant (eyes and skin); potential nervous system toxin	7-13
40372-66-5	1,2,4-BUTANETRICARBOXYLIC ACID, 2-PHOSPHONO-, SODIUM SALT Irritant (eyes)	7-13
7558-79-4	DISODIUM PHOSPHATE (SODIUM PHOSPHATE,DIBASIC) Irritant (eyes)	3-7
7631-95-0	SODIUM MOLYBDATE (MOLYBDIC ACID,DISODIUM SALT) Potential irritant (respiratory); potential lung toxicity	3-7

4 First-aid measures

SKIN CONTACT:

Wash thoroughly with soap and water. Remove contaminated clothing. Thoroughly wash clothing before reuse. Get medical attention if irritation develops or persists.

EYE CONTACT:

URGENT! Immediately flush eyes with plenty of low-pressure water for at least 20 minutes while removing contact lenses. Hold eyelids apart. Get immediate medical attention.

INHALATION:

If nasal, throat or lung irritation develops - remove to fresh air and get medical attention.

INGESTION:

Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Immediately contact physician. Dilute contents of stomach using 2-8 fluid ounces (60-240 mL) of milk or water.

NOTES TO PHYSICIANS:

No special instructions

5 Fire-fighting measures

FIRE FIGHTING INSTRUCTIONS:

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

EXTINGUISHING MEDIA:

dry chemical, carbon dioxide, foam or water

HAZARDOUS DECOMPOSITION PRODUCTS:

elemental oxides

FLASH POINT:

> 200F > 93C P-M(CC)

6 Accidental release measures

PROTECTION AND SPILL CONTAINMENT:

Ventilate area. Use specified protective equipment. Sweep up and remove. Minimize dust generation.

DISPOSAL INSTRUCTIONS:

Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit. Product as is - Incinerate or land dispose in an approved landfill.

7 Handling and storage

HANDLING:

Clean spill immediately. Wash contaminated skin promptly.

STORAGE:

Keep containers closed when not in use. Protect from freezing and high temperature storage. Avoid moisture contamination. Do not store near strong acids, alkalies or oxidizers.

8 Exposure controls / personal protection

EXPOSURE LIMITS

CHEMICAL NAME

TRISODIUM PHOSPHATE (SODIUM PHOSPHATE, TRIBASIC)

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

1-H-BENZOTRIAZOLE, SODIUM SALT

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

1,2,4-BUTANETRICARBOXYLIC ACID, 2-PHOSPHONO-, SODIUM SALT

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

DISODIUM PHOSPHATE (SODIUM PHOSPHATE, DIBASIC)

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

SODIUM MOLYBDATE (MOLYBDIC ACID, DISODIUM SALT)

PEL (OSHA): 5 MG/M3 (AS Mo)

TLV (ACGIH): 0.5 MG/M3 (AS Mo) RESPIRABLE FRACTION

8) EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

ENGINEERING CONTROLS:

Adequate ventilation to maintain air contaminants below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Use protective equipment in accordance with 29CFR 1910 Subpart I

RESPIRATORY PROTECTION:

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.

USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS.

If air-purifying respirator use is appropriate, use any of the following particulate respirators: N95, N99, N100, R95, R99, R100, P95, P99 or P100.

SKIN PROTECTION:

rubber, butyl, viton or neoprene gloves -- Wash off after each use. Replace as necessary.

EYE PROTECTION:

airtight chemical goggles

9 Physical and chemical properties

Density	NO DATA	Vapor Pressure (mmHG)	< 1.0
Freeze Point (F)	NA	Vapor Density (air=1)	< 1.00
Freeze Point (C)	NA		
Viscosity(cps 70F, 21C)	NA	% Solubility (water)	~ 10.0
Odor		Slight	
Appearance		Yellow To Brown	
Physical State		Solid	
Flash Point	P-M(CC)	> 200F > 93C	
pH 1% Sol. (approx.)		~ 11.0	
Evaporation Rate (Ether=1)		< 1.00	
Percent VOC:		0.0	

NA = not applicable ND = not determined

10 Stability and reactivity

CHEMICAL STABILITY:

Stable under normal storage conditions.

POSSIBILITY OF HAZARDOUS REACTIONS:

No known hazardous reactions.

INCOMPATIBILITIES:

May react with strong oxidizers.

DECOMPOSITION PRODUCTS:

elemental oxides

11 Toxicological information

No Data Available.

12 Ecological information

AQUATIC TOXICOLOGY

Daphnia magna 48 Hour Static Renewal Bioassay (pH adjusted)

LC50= 1670; No Effect Level= 820 mg/L

Fathead Minnow 96 Hour Static Renewal Bioassay (pH adjusted)

LC50= 1060; No Effect Level= 824 mg/L

BIODEGRADATION

No Data Available.

13 Disposal considerations

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is :
Not applicable.

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

14 Transport information

DOT HAZARD: Not Applicable

PROPER SHIPPING NAME:

DOT EMERGENCY RESPONSE GUIDE #: Not applicable

Note: Some containers may be DOT exempt, please check BOL for exact container classification

15 Regulatory information

TSCA:

All components of this product are included on or are in compliance with the U.S. TSCA regulations.

CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):

No regulated constituent present at OSHA thresholds

NSF Registered and/or meets USDA (according to 1998 Guidelines):

Registration number: 140951

Category Code(s):

- G5 Cooling and retort water treatment products - all food processing areas
- G7 Boiler treatment products - all food processing areas/nonfood contact

SARA SECTION 312 HAZARD CLASS:

Immediate(acute);Delayed(Chronic)

SARA SECTION 302 CHEMICALS:

No regulated constituent present at OSHA thresholds

SARA SECTION 313 CHEMICALS:

No regulated constituent present at OSHA thresholds

CALIFORNIA REGULATORY INFORMATION

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65):

No regulated constituents present

MICHIGAN REGULATORY INFORMATION

No regulated constituent present at OSHA thresholds

16 Other information

HMIS VII

CODE TRANSLATION

Health	2	Moderate Hazard
Fire	1	Slight Hazard
Reactivity	0	Minimal Hazard
Special	NONE	No special Hazard
(1) Protective Equipment	B	Goggles,Gloves

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
	-----	-----	-----
MSDS status:	14-JUL-2000		** NEW **
	03-OCT-2001	15	14-JUL-2000
	09-JAN-2002	2,3,8	03-OCT-2001
	10-JAN-2003	2,7,8	09-JAN-2002
	24-MAR-2005	2	10-JAN-2003
	26-MAY-2006	8	24-MAR-2005
	15-MAY-2009	4,8,10,15	26-MAY-2006
	28-MAY-2009	3,6,8,15	15-MAY-2009
	18-JUN-2009	15	28-MAY-2009

CORPORATE EXPRESS

1 Environmental Way

Broomfield, CO 80021

Business Phone: 1.888.203.5101

24-HR MEDICAL AND DOT EMERGENCIES: 1.888.322.0912

MSDS #: MSDS SEB6400**Hazard Rating** **HMIS** **NFPA**

Health 1 1

Flammability 0 0

Reactivity 0 0

Special None None

MATERIAL SAFETY DATA SHEET

Complies with ANSI Z400.1 Format

SECTION 1: PRODUCT IDENTIFICATIONProduct: **NEUTRAL MULTI-USE CLEANER Sustainable Earth® 64** MSDS CODE: SEB6400.1007

This MSDS applies to Product Numbers: SEB6401, SEB6402QM, SEB6404HM, SEB6405, SEB6409, SEB6409T, SEB6415 and SEB6434

GENERIC DESCRIPTION

Concentrated General Purpose Cleaner

DATE ISSUED

10-1-07

SUPERSEDES

6-1-07

PREPARED BY

Regulatory Specialist

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

Components*	% by Wt.	CAS #	Exposure Limit	LC ₅₀ /LD ₅₀
Hydrogen Peroxide	0.5-1.0	7722-84-1	OSHA/TWA: 1.4 mg/m³ ACGIH TWA: 1.4 mg/m³	ORAL 1518 mg/kg (rat) DERMAL 4060 mg/kg (rat) VAPOR 2000 mg/m³ 4-hrs (rat)
Alcohol Ethoxylate	10-15	88439-46-3	Not Established	
Water	60-100	7732-18-5	Not Established	

SECTION 3: HAZARD IDENTIFICATION

Primary Entry Routes: Skin Contact **Signs & Symptoms of Exposure:** Incidental skin contact is not expected to cause any significant irritation. **Effects of Overexposure:** Based on Corrosion in vitro testing this product is not corrosive and with prolonged skin contact or eye contact may cause slight reddening but will be non-irritating. This product has a low potential for skin absorption based upon review of the absorption information provided by individual ingredients manufacturers.

SECTION 4: FIRST AID MEASURES

Emergency First Aid Procedures: **SKIN CONTACT:** Rinse skin thoroughly with water. **EYE CONTACT:** Flush eyes with water for 15-20 minutes. If reddening occurs and persists then get prompt medical aid. **INGESTION:** Drink large amounts of water, consult a physician.
24-HR MEDICAL EMERGENCY PHONE: 1.888.322.0912

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: None- This product is not considered a fire hazard, nor will it support combustion. **Extinguishing Media:** Use standard firefighting measures to extinguish fires involving this material (water spray, dry chemicals or foam).

SECTION 6: ACCIDENTAL RELEASE MEASURES

Release or Spill: Recover liquid with wet mop or wet/dry vacuum. Flush residue to sanitary sewer with water. Use care, floor may become slippery. All Federal, State and Local regulations should be carefully followed. Discarded product is not a hazardous waste according to RCRA, 40 CFR 261.

SECTION 7: HANDLING AND STORAGE

Keep out of reach of children. Avoid eye and prolonged skin contact.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Respiratory Protection: No special requirements under normal use conditions. **Protective Gloves:** No special requirements for normal use conditions. **Eye Protection:** No special requirements for normal use conditions.
Other Protective Measures: None

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor: Yellow Liquid Boiling Point: >212°F Evap. Rate: NA pH Concentrated Form: 8.5
Vapor Density: ND Vapor Pressure: <1.0 Specific Gravity: 1.01 Solubility in Water: Soluble %Volatile: 100
V.O.C. Content (by weight): <1%

SECTION 10: STABILITY AND REACTIVITY

Neutral Multi-Use Cleaner is stable and non-reactive.

SECTION 11: TOXICOLOGICAL INFORMATION

Oral Toxicity: This product is non-toxic based upon current information available to Corporate Express and provided by all ingredient manufacturers. It exhibits acute oral LD₅₀ values greater than >5g/kg for rats and acute dermal LD₅₀ values greater than >2g/kg for rabbits. **No PBTs:** This product contains none of the persistent, bioaccumulative and toxic chemicals (PBT) as listed by EPA: dioxins & furans, toxaphene, PCBs, Mirex, Mercury & compounds, Octachlorostyrene, alkyl-lead, DDT, Hexachlorobenzene, aldrin/dieldrin, benzo(a)pyrene and chlordane. **No Butyl:** Contains no 2-butoxyethanol (butyl). **No Endocrine Modifiers:** Based upon information provided by manufacturers of all ingredients used to manufacture this product, none of the ingredients used in this product contain APE, OPE, NPE or dibutyl phthalate.

SECTION 12: ECOLOGICAL INFORMATION

The organic ingredients are readily biodegradable based upon the Modified OECD screening tests. After this product's use, it will biodegrade in sewage systems and/or the environment. Contains no nonyl phenol ethoxylates or alkylphenol ethoxylates (APE). No ingredients used to make this product are listed in the toxic release inventory (TRI) chemicals list under Superfund Amendments and Reauthorization Act (SARA) Title III, Section 313. This product contains no ozone-depleting chlorinated compounds as specified by the Montreal Protocol. This product contains no paradichlorobenzene 1,4-dioxane, sodium hypochlorite, NTA or sodium EDTA.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Information: Waste Disposal Information: No special method. Observe all applicable Federal, State and Local regulations, rules and/or ordinances regarding disposal of non-hazardous materials. Discarded product is not a hazardous waste according to RCRA, 40 CFR 261. This product is not considered a hazardous waste as defined in WAC 173-303-070 or as characterized in WAC 173-303-080. Observe all applicable Federal, State and Local regulations, rules and/or ordinances regarding disposal of non-hazardous materials.

SECTION 14: TRANSPORT INFORMATION

DOT EMERGENCY 24-HR: 1.888.322.0912 U.S. DOT Class: Not Regulated
DOT Shipping Name: Compound, Cleaning Liquid

SECTION 15: REGULATORY INFORMATION

SARA Title III Section 313 and 40 CFR Part 372 Notification: See section 2.
No ingredients in this product are currently listed as carcinogens by NTP, IARC or OSHA. All components of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

SECTION 16: OTHER INFORMATION

Always follow label directions carefully when using this or any other chemical product. If information about this product is required, please contact CORPORATE EXPRESS at 1.888.203.5101 or visit our website at www.corporateexpress.com. Keep MSD Sheets filed and organized in an area accessible to workers according to the Hazard Communication Standards.

All information contained in this Material Safety Data Sheet is provided to the best of Corporate Express' knowledge. No warranty is made with respect to this information, expressed or implied, including warranties of merchantability or fitness for a particular purpose. Users are responsible for verifying the information under their own operating conditions to determine whether the products listed in the MSDS are suitable for their intended use. The information contained herein is confidential, intended solely for the user's internal use and may not be provided to any third parties. Users are responsible for compliance with all laws and regulations as may be required by their receipt of the information and use of the products provided with this MSDS.



MATERIAL SAFETY DATA SHEET

PRODUCT BULLETIN 03

Physical/Chemical Properties

Physical Form: **Yellow liquid with bland odor.**
Boiling Point: **212° F.** Freezing Point: **28° F.**
Vapor Pressure/Density: **Not Determined.** pH: **13.5.**
Solubility in Water: **100%.** Specific Gravity (water=1): **1.08.**
Evaporation Rate (butylacetate=1): **<1.**

Stability and Reactivity

Chemical Stability: **100%.**
Hazardous Polymerization: **Will not occur.**
Hazardous Decomposition Products: **None known.**
Incompatibility: **Will attack aluminum upon prolonged contact due to alkaline nature.**

Toxicological Information

Non-carcinogenic, non-mutagenic, essentially non-hazardous when used as directed following cautionary information.

Ecological Information

Fully biodegradable as determined by individual laboratory testing. Neutralize product waste with citric acid and dispose of in accordance with all local, state and federal regulations.

Disposal Considerations

This product is not considered a hazardous waste when disposed of properly. See "Ecological Information" above.

Transport Information

This product is not regulated.

Regulatory Information

This document has been prepared according to OSHA Standard 29 CFR 1910-1200. It is your responsibility and legal duty to make all information in this MSDS available to our employees, and to anyone who requests this information after product purchase.
TSCA: **All product components are listed on or exempted from the Toxic Substance Control Act inventory list.**
CERCLA: **None.**
SARA Title III: **None.**
CA Prop 65: **None.**

Other Information

The information contained herein is believed to be accurate, based on current component MSDS knowledge and experience. It is provided independently of any sale of this product for purpose of hazard communication as part of PPC's product safety program. It is not intended to constitute performance information concerning this product. No responsibility is assumed that the information is sufficient or correct in all cases. No express or implied warranty of merchantability or fitness for particular purpose is made with respect to the product or the information contained herein. This information and product are provided on the condition that the user shall make determination as to the suitability for a particular purpose, and on the condition that user shall assume all risks of use thereof.

Chemical Product and Company Identification

Product Name: **CRUD REMOVER** PPC Catalog Number: **03**
Manufacturers Name and Address:
Protective Products Corp., Box 246, Johnston, IA 50131
Product Use: **Cleaner/Degreaser**
24 Hr. Emergency Telephone: **888-772-1277**
Information Telephone: **515-986-5070**
Issue Date: **04-01-05** Prepared by: **Dean Bibler**

Composition/Information on Ingredients

Hazardous Components: **Sodium Hydroxide CAS #1310-73-2 <4%**
2-Butoxyethanol CAS #111-76-2 <11%

Hazardous Identification

HMIS and NFPA Hazard Ratings:
Health - 1, Flammability - 0, Reactivity - 0.
Skin: **Can cause drying, cracking; burns with prolonged contact.**
Eyes: **Can cause irritation, redness; burns with prolonged contact.**
Ingestion: **Can cause tissue damage in mouth and throat if swallowed.**
Inhalation: **Vapor and mist can cause irritation; minor burns to nose and mucous linings.**

First Aid Measures

Skin: **Flush with plenty of cool water; remove any affected clothing.**
Eyes: **Flush with cool water immediately for 15 minutes; rinse with boric acid solution, get medical attention.**
Ingestion: **Drink copious amounts of acidic fruit juice or milk; do not induce vomiting; get medical attention.**
Inhalation: **Move to fresh air. Treat symptomatically.**

Fire Fighting Measures

None. Non-flammable solution.

Accidental Release measures

Large Spills: **Flush affected area with water; neutralize with citric acid; flush to sewer with water.**
Small Spills: **Absorb with paper towels, newspapers, vermiculite, etc. Flush area with water; mop dry.**

Handling and Storage

Storage: **Keep from freezing. Keep away from food products.**
Handling: **Avoid breathing mist and vapors. Use with adequate ventilation. Avoid contact with eyes, skin, clothing. Do not ingest. Wash thoroughly after handling. Rinse all bulk containers prior to disposal.**

Exposure Controls/Personal Protection

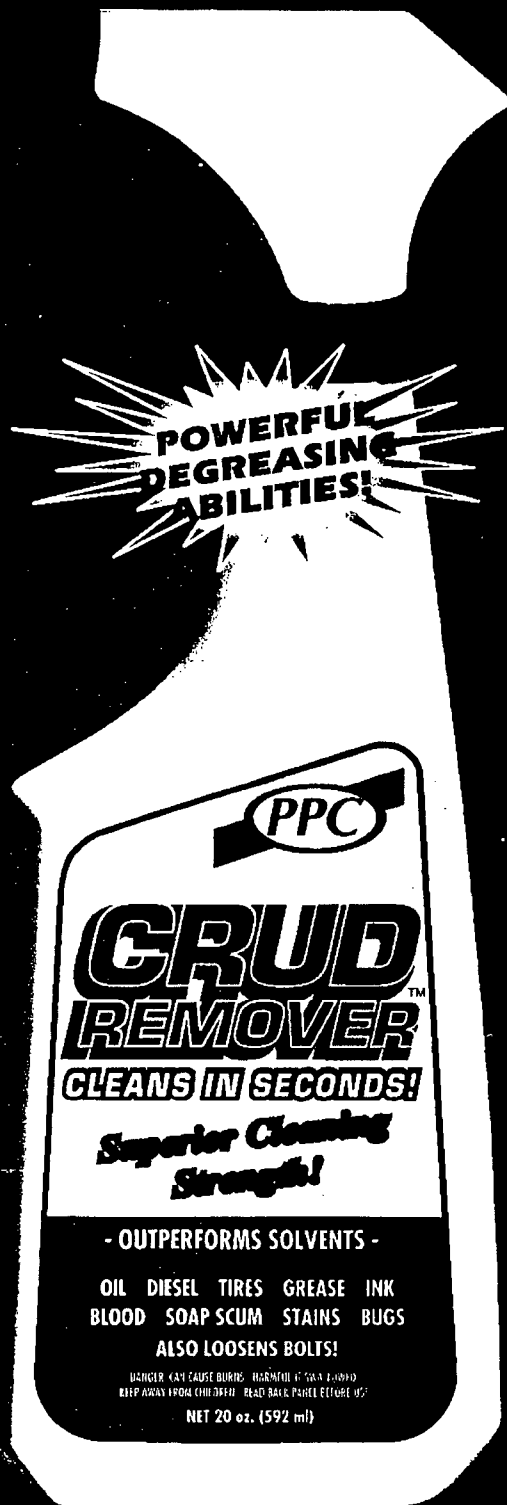
General Use: **No specific protection required; use appropriately as per directions on label.**
Ventilation: **Local fan; good general ventilation.**
Eye Protection: **Safety glasses or goggles.**
Skin Protection: **Rubber gloves; appropriate clothing.**
Respiratory Protection: **Approved chemical mask if spraying bulk product at full strength.**
Recommended Decontamination Facilities: **Eyebath, washing facilities, safety shower.**



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Product No. 03



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- Biodegradable soap formula outperforms most solvents.
- Can be diluted, heated or applied in any manner.

Concentrated, Versatile, USDA Approved!

- Can be used on machinery, engines, plumbing, HVAC units, fireplaces, barbeque, carpeting, shower stalls, clothing, boat bilges, whitewalls, building maintenance, etc., etc.

Cleans/Degreases Most Anything!

- Removes diesel, oil, grease, soot, brake dust, blood, ink, algae, mildew, soap scum, surface rust, spray paint, bug splatter, grass stain, floor wax, etc., etc. Also loosens bolts!



Known as the strongest cleaner in the U.S.

**Material Safety Data Sheet**

Hydrochloric acid solutions, 0.5%-50% v/v, 0.01N-6.25N

Section 1 - Chemical Product and Company Identification**MSDS Name:**

Hydrochloric acid solutions, 0.5%-50% v/v, 0.01N-6.25N

Catalog Numbers:

LC14970, LC15000, LC15050, LC15070, LC15090, LC15100, LC15130, LC15150, LC15170, LC15200, LC15220, LC15240, LC15250, LC15280, LC15290, LC15300, LC15320, LC15330, LC15340, LC15345, LC15360, LC15370, LC15380

Synonyms:

Muriatic acid, chlorohydric acid

Company Identification:LabChem, Inc.
200 William Pitt Way
Pittsburgh, PA 15238**Company Phone Number:**

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
7647-01-0	Hydrogen chloride	0.5 - 50

Section 3 - Hazards Identification**EMERGENCY OVERVIEW***Appearance: Colorless liquid**Danger! Corrosive. Causes severe eye and skin burns. Causes severe digestive and respiratory tract burns.**Target Organs: None.***Potential Health Effects****Eye:**

Vapors are irritating to the eye, liquid contact may result in clouding of the cornea, erosion, up to total corneal opacification and loss of the eye.



Material Safety Data Sheet

Hydrochloric acid solutions, 0.5%-50% v/v, 0.01N-6.25N

Skin:

May cause severe burns and ulceration. Skin may turn brown-yellow. Deep burns are slow to heal and scarring may occur.

Ingestion:

Causes severe digestive tract burns with abdominal pain, vomiting, and possible death. May cause corrosion and permanent tissue destruction of the esophagus and digestive tract.

Inhalation:

May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. Palpitation, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema may result from inhalation exposure.

Chronic:

Chronic exposure may result in dental erosion, jaw necrosis, respiratory disease, dermatitis, conjunctivitis, corneal scarring and fever.

Section 4 - First Aid Measures

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until chemical is gone. Get medical aid at once. SPEEDY ACTION IS CRITICAL!

Skin:

Get medical aid at once. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. SPEEDY ACTION IS CRITICAL!

Ingestion:

Do NOT induce vomiting. Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid at once.

Inhalation:

Get medical aid at once. Move victim to fresh air immediately. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam.

Autoignition Temperature:

Not applicable.

Flash Point:

Not applicable.

NFPA Rating:

CAS# 7732-18-5: Not published.

CAS# 7647-01-0: Health - 3; flammability - 0; reactivity - 1.



Material Safety Data Sheet

Hydrochloric acid solutions, 0.5%-50% v/v, 0.01N-6.25N

Explosion Limits:

Lower: No information Upper: No information

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal. Large spills may be neutralized with dilute alkaline solutions of soda ash, or lime. Clean up spills immediately, observing precautions in the Protective Equipment section.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Wash hands before eating. Use only in a well ventilated area. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Do not allow contact with water. Use caution when opening.

Storage:

Store in a cool, dry area. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Hydrogen chloride	None of the components are on this list.	None of the components are on this list.	C 5 ppm; C 7 mg/m ³ ;

OSHA Vacated PELs

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.



Material Safety Data Sheet

Hydrochloric acid solutions, 0.5%-50% v/v, 0.01N-6.25N

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: Colorless

Odor: Pungent at high concentrations

pH: Acidic (<7)

Vapor Pressure: 14 mm Hg @ 20°C

Vapor Density: 0.7 (Air=1)

Evaporation Rate: >1 (ether=1)

Viscosity: No information found.

Boiling Point: 212-227°F

Freezing/Melting Point: 32°F (0.00°C)

Decomposition Temperature: No information found.

Solubility in water: No information found.

Specific Gravity/Density: 1.0-1.2 (Water=1)

Molecular Formula: HCl

Molecular Weight 36.46

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

High temperatures, strong oxidants.

Incompatibilities with Other Materials

Acids (organic, e.g. acetic acid, benzoic acid, formic acid, methanoic acid, oxalic acid), alcohols and glycols (e.g. butyl alcohol, ethanol, methanol, ethylene glycol), aldehydes (e.g. acetaldehyde, acrolein, chloral hydrate, formaldehyde), amides (e.g. butyramide, diethyltoluamide, dimethyl formamide), amines (aliphatic and aromatic, e.g. dimethyl amine, propylamine, pyridine, triethylamine), azo, diazo, and hydrazines (e.g. dimethyl hydrazine, hydrazine, methyl hydrazine), carbamates (e.g. carbanolate, carbofuran), caustics (e.g. ammonia, ammonium hydroxide, calcium hydroxide, potassium hydroxide, sodium hydroxide), cyanides (e.g. potassium cyanide, sodium cyanide), dithiocarbamates (e.g. ferbam, maneb, metham, thiram), esters (e.g. butyl acetate, ethyl acetate, propyl formate), ethers (e.g. dioxane, furfuran, tetrahydrofuran (THF)), fluorides (inorganic, e.g. ammonium fluoride, calcium fluoride, cesium fluoride), hydrocarbons (aromatic, e.g. benzene, chrysene, cumene, toluene), halo.

Hazardous Decomposition Products

Hydrogen chloride, hydrogen gas.

Hazardous Polymerization

Has not been reported.



Material Safety Data Sheet

Hydrochloric acid solutions, 0.5%-50% v/v, 0.01N-6.25N

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 7647-01-0: MW4025000.

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 7647-01-0:

Inhalation, mouse: LC50 = 1108 ppm/1H

Inhalation, rat: LC50 = 3124 ppm/1H

Oral, rabbit: LD50 = 900 mg/kg.

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 7647-01-0

ACGIH: Not listed.

California: Not listed.

NIOSH: Not listed.

NTP: Not listed.

OSHA: Not listed.

IARC: Group 3

Epidemiology:

No information available.

Teratogenicity:

Embryo or Fetus: Stunted fetus, ihl-rat TCL0=450 mg/m3/1H Specific Developmental Abnormalities: homeostatis, ihl-rat TCL0=450 mg/m3/1H

Reproductive:

No information available.

Mutagenicity

Sln-dmg-ihl:100 ppm/24H sln-dmg-orl:100 ppm cyt-grh-par:20 mg cyt-ham lung:30 mmol/l cyt-ovr-ham:8 mmol/l

Neurotoxicity

No information found.

Section 12 - Ecological Information

Ecotoxicity:

Trout LC100=10 mg/l/24H Shrimp LC50=100-330 ppm Starfish LC50=100-330 mg/l/48H Shore crab LC50=240 mg/l/48H

Chronic plant toxicity=100 ppm Fish-toxicity LC50:862 mg/l

Environmental:

Substance will neutralize soil carbonate-based components.

Physical:

No information available.

Other:

None.



Material Safety Data Sheet

Hydrochloric acid solutions, 0.5%-50% v/v, 0.01N-6.25N

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

	1% to 40% W/W	0.5% to 1% W/W	0% to 0.5% W/W
Shipping Name:	Hydrochloric acid solution	Hydrochloric acid solution	Not regulated
Hazard Class:	8	8	
UN Number:	UN1789	UN1789	
Packing Group:	PG II	PG III	

Section 15 - Regulatory Information

US Federal

TSCA

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 7647-01-0 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ)

CAS# 7647-01-0: final RQ = 5000 pounds (2270 kg)

CERCLA/SARA Section 313

This material contains Hydrogen chloride (CAS# 7647-01-0, 1-50%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

OSHA - Highly Hazardous

CAS# 7647-01-0 is considered highly hazardous by OSHA.

US State

State Right to Know

Hydrogen chloride can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California Regulations

European/International Regulations

Canadian DSL/NDSL

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 7647-01-0 is listed on Canada's DSL List.

Canada Ingredient Disclosure List

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 7647-01-0 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: November 1, 1997



Material Safety Data Sheet

Hydrochloric acid solutions, 0.5%-50% v/v, 0.01N-6.25N

Revision Date: September 19, 2007

Information in this MSDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and LabChem Inc. assumes no liability resulting from the use of this MSDS. The user must determine suitability of this information for his application.



MATERIAL SAFETY DATA SHEET

1 CHEMICAL PRODUCT & COMPANY IDENTIFICATION

TRADE NAME(S) **SULFURIC ACID**
CAS NUMBER 7664-93-9
MSDS NUMBER 5371
PRODUCT CODE ND
SYNONYM(S) OIL OF VITRIOL
MANUFACTURER /
SUPPLIER Koch Sulfur Products Company
PO Box 2256
Wichita, KS
67201

TELEPHONE NUMBERS - 24 HOUR ASSISTANCE

Chemtrec: 800-424-9300
Reference Koch Subsidiary:
Koch Sulfur Products Company

TELEPHONE NUMBERS - GENERAL ASSISTANCE

8-5 (M-F, CST) 316-828-3019
8-5 (M-F, CST) MSDS 316-828-8488
Assistance

2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS Number	Concentration*	Exposure Limits / Health Hazards
SULFURIC ACID	7664-93-9	7 - 100 %	1 mg/m3 8-Hour TWA (OSHA) 1 mg/m3 8-Hour TWA (ACGIH) 3 mg/m3 15-Min STEL (ACGIH)

*Values do not reflect absolute minimums and maximums; these values are typical which may vary from time to time.

3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER!

HEALTH HAZARDS

MAY BE CORROSIVE TO THE SKIN, EYES AND RESPIRATORY TRACT
ASPIRATION HAZARD IF SWALLOWED-CAN ENTER LUNGS AND CAUSE DAMAGE
CANCER HAZARD
SEE "TOXICOLOGICAL INFORMATION" (SECTION 11) FOR MORE INFORMATION

FLAMMABILITY HAZARDS

NON-COMBUSTIBLE

REACTIVITY HAZARDS

MAY REACT VIOLENTLY WITH WATER

ND = No Data NA = Not Applicable

Material Id 5371

Trade Name SULFURIC ACID

Printed On 4/23/2002

1 / 7

POTENTIAL HEALTH EFFECTS, SKIN

CORROSIVE. Contact may cause reddening, itching, inflammation, burns, blistering and possibly severe tissue damage. Repeated or prolonged contact may result in drying, reddening, itching, pain, inflammation, cracking and possible secondary infection with tissue damage.

POTENTIAL HEALTH EFFECTS, EYE

CORROSIVE. Exposure may cause severe burns, destruction of eye tissue and possible permanent injury or blindness. Prolonged or repeated exposure may cause irritation and conjunctivitis.

POTENTIAL HEALTH EFFECTS, INHALATION

EXTREMELY IRRITATING AND CORROSIVE. May cause severe burns and tissue damage to the respiratory tract. Symptoms may include throat burns, constriction of the windpipe (bronchospasms), severe pulmonary edema and death, depending on the concentration and duration of exposure.

Overexposure to this material may cause systemic damage including target organ effects listed under "Toxicological Information" (Section 11).

Other specific symptoms of exposure are listed under "Toxicological Information" (Section 11).

POTENTIAL HEALTH EFFECTS, INGESTION

CORROSIVE. May cause painful irritation and burning of the mouth and throat, painful swallowing, labored breathing, burns or perforation of the gastrointestinal tract leading to ulceration and secondary infection. Corrosive damage to the stomach and esophagus may be delayed.

Aspiration into lungs may cause chemical pneumonia and lung damage.

Overexposure to this material may cause systemic damage including target organ effects listed under "Toxicological Information" (Section 11).

Other specific symptoms of exposure are listed under "Toxicological Information" (Section 11).

4 FIRST AID MEASURES**SKIN**

Immediately flush skin with plenty of water, for at least 15 minutes, while removing contaminated clothing and shoes. GET IMMEDIATE MEDICAL ATTENTION.

Place contaminated clothing in closed container for storage until laundered or discarded. If clothing is to be laundered, inform person performing operation of contaminant's hazardous properties. Discard contaminated leather goods.

EYE

Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. GET IMMEDIATE MEDICAL ATTENTION.

INHALATION

Remove to fresh air. If not breathing, institute rescue breathing. If breathing is difficult, ensure airway is clear and give oxygen.

Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

INGESTION

If victim is conscious and alert, give 1-3 glasses of water to dilute stomach contents. Rinse mouth out with water. Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs keep head below hips to prevent aspiration and monitor for breathing difficulty.

Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

5 FIRE FIGHTING MEASURES**HAZARDOUS COMBUSTION PRODUCTS**

Decomposes to form sulfur dioxide and sulfur trioxide.

EXTINGUISHING MEDIA

Use carbon dioxide or dry chemical to extinguish fire.

BASIC FIRE FIGHTING PROCEDURES

Do not add water to acid. Water applied directly results in evolution of heat and splattering of acid. Acid can react with metals to liberate flammable hydrogen gas, especially when diluted with water. Evacuate area and fight fire from a safe distance.

Use water spray to cool adjacent structures and to protect personnel. Do not get water inside sulfuric acid containers. Shut off source of flow if possible. Stay away from storage tank ends. Withdraw immediately in case of rising sound from venting safety device or any discoloration of storage tank due to fire.

Firefighters must wear MSHA/NIOSH approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment.

UNUSUAL FIRE & EXPLOSION HAZARDS

Material will not burn.

Reacts with most metals to produce hydrogen gas which can form an explosive mixture with air.

Flash Point	ND
Autoignition Temperature	ND
Flammability Limits in Air, Lower, % by Volume	ND
Flammability Limits in Air, Upper, % by Volume	ND

6 ACCIDENTAL RELEASE MEASURES

EMERGENCY ACTION

Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind. Isolate for 1/2 mile in all directions if tank, rail car or tank truck is involved in fire. Evacuate area endangered by release as required. (See Exposure Control/Personal Protection - Section 8).

ENVIRONMENTAL PRECAUTIONS

If product is released to the environment, take immediate steps to stop and contain release. Caution should be exercised regarding personnel safety and exposure to the released product. Notify local authorities and the National Response Center, if required.

SPILL OR LEAK PROCEDURE

Keep unnecessary people away. Isolate area for at least 50-100 meters (160-330 feet) to preserve public safety. For large spills, consider initial evacuation for at least 300 meters (1000 feet).

Large spills may be neutralized with dilute alkaline solutions of soda ash or lime. Stop leak when safe to do so.

See Exposure Controls/Personal Protection (Section 8).

7 HANDLING & STORAGE

HANDLING

This material should be stored and shipped in plastic or plastic lined containers. Do not use with materials or equipment sensitive to acidic solutions.

Do not eat, drink or smoke in areas of use or storage.

STORAGE

Avoid contact with combustible materials, water, metals and alkalies. Store in a vented container. Sulfuric acid reacts with most metals to produce hydrogen gas which can form an explosive mixture with air.

Empty containers may contain product residue. Do not reuse without adequate precautions.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS

Ventilation and other forms of engineering controls are the preferred means for controlling exposures.

EYE PROTECTION: PERSONAL PROTECTION EQUIPMENT (PPE)

Wear chemical safety goggles and face shield. Have eye washing facilities readily available where eye contact can occur.

SKIN PROTECTION: PERSONAL PROTECTION EQUIPMENT (PPE)

Avoid skin contact with this material. Use appropriate chemical protective gloves when handling.

Additional protection may be necessary to prevent skin contact including use of apron, gauntlets, boots, impervious protective suit and face shield or splash goggles. Provide safety showers at any location where skin contact can occur.

Use good personal hygiene.

RESPIRATORY PROTECTION: PERSONAL PROTECTION EQUIPMENT (PPE)

A NIOSH/MSHA approved air purifying respirator with an appropriate acid gas cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

9 PHYSICAL & CHEMICAL PROPERTIES

ODOR AND APPEARANCE

COLORLESS TO CLOUDY OILY LOOKING LIQUID WITH A PUNGENT ODOR

Boiling Point	7-85% - 215-440 °F, 93% - 541 °F, 96% - 586 °F, 99% - 625 °F
Specific Gravity	7-85% - 1.04-1.79, 93% - 1.84, 96% - 1.84, 99% - 1.84
Melting Point	ND
Percent Volatile	ND
Vapor Pressure	AT 100 °F (7-85% - 48-<1, 93%-<1, 96%-<1, 99%-<1)
Vapor Density	ND
Bulk Density	ND
Solubility in Water	100 %
Octanol/Water Partn	ND
Volatile Organic	ND
Pour Point	ND
pH Value	< 1
Freezing Point	7-85% - 30-(-40) °F, 85% - (-40) °F, 93% - (-29) °F, 96% - 10 °F, 99% - 45 °F
Viscosity	ND
Evaporation Rate	ND
Molecular Formula	H2SO4
Molecular Weight	98.07
Chemical Family	MINERAL ACID
Odor Threshold	ND

10 STABILITY & REACTIVITY

STABILITY/INCOMPATIBILITY

Avoid contact with water.

Incompatible with combustible materials, water, metals and alkalis. See precautions under Handling & Storage (Section 7).

HAZARDOUS REACTIONS/DECOMPOSITION PRODUCTS

Decomposes to form sulfur dioxide and sulfur trioxide.

11 TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE

Inhalation, ingestion, skin and eye contact.

LD50

LD50: Sulfuric Acid, Rat, Oral, 2140 mg/kg.

TOXICOLOGICAL DATA

Acute or chronic overexposure to this material or its components may cause systemic toxicity, including adverse effects to the following: kidney, liver, teeth, respiratory and cardiovascular systems.

Exposure to components of this material may cause the following specific symptoms, depending on the concentration and duration of exposure: attacks enamel of teeth, vomiting, clammy skin, weak and rapid pulse. Other symptoms of exposure may include the following: shallow respiration, chronic bronchitis, lung function changes and scanty urine.

CARCINOGENICITY

IARC has determined that there is sufficient evidence for the carcinogenicity of occupational exposure to strong inorganic acid mists containing sulfuric acid in humans (IARC Class 1).

PRE-EXISTING CONDITIONS AGGRAVATED BY EXPOSURE

Pre-existing medical conditions which may be aggravated by exposure include disorders of the skin and respiratory system.

12 ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

ND

13 DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

This product as supplied, when discarded or disposed of, is a hazardous waste according to Federal regulations (40 CFR 261) due to its corrosivity and reactivity. Under the Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user of the product to determine, at the time of disposal, whether the material is a hazardous waste subject to RCRA.

The transportation, storage, treatment and disposal of RCRA waste material must be conducted in compliance with 40 CFR 262, 263, 264, 268 and 270. Disposal can occur only in properly permitted facilities. Check state and local regulations for any additional requirements as these may be more restrictive than federal laws and regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Disposal of this material must be conducted in compliance with all federal, state and local regulations.

14 TRANSPORT INFORMATION

BILL OF LADING - BULK (U. S. DOT)

RQ, Sulfuric Acid, 8, UN1830, PG II (use with more than 51% acid)

RQ, Sulfuric Acid, 8, UN2796, PG II (use with not more than 51% acid)

BILL OF LADING - NON-BULK (U. S. DOT)

RQ, Sulfuric Acid, 8, UN1830, PG II (use with more than 51% acid)

RQ, Sulfuric Acid, 8, UN2796, PG II (use with not more than 51% acid)

U. S. Department of Transportation (DOT) Requirements**General Transportation Information for Bulk Shipments**

Proper Shipping Name	Sulfuric Acid	UN/NA Code	UN1830, UN2796
Hazard Class	8		
Packaging Group	PG II		
Labels Required	Corrosive		
Placards Required	Corrosive, UN1830 (>51%), UN2796 (<=51%)		
Reportable Quantity	See Regulatory Information (Section 15)		

General Transportation Information for Non-Bulk Shipments

Proper Shipping Name	Sulfuric Acid	UN/NA Code	UN1830, UN2796
Hazard Class	8		
Packaging Group	PG II		
Labels Required	Corrosive		
Placards Required	Corrosive, UN1830 (>51%), UN2796 (<=51%)		
Reportable Quantity	See Regulatory Information (Section 15)		

The above description may not cover shipping in all cases, please consult 49 CFR 172.101 for specific shipping information.

15 REGULATORY INFORMATION**FEDERAL REGULATIONS**

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

This product, as supplied, contains sulfuric acid, a Hazardous Substance as per 40 CFR Part 302.4 and an Extremely Hazardous Substance as per 40 CFR Part 355. The reportable quantity for sulfuric acid is 1000 pounds. Any release of this product equal to or exceeding the reportable quantity must be reported to the National Response Center (800-424-8802) and appropriate state and local regulatory agencies as described in 40 CFR Part 302.6 and 40 CFR 355.40, respectively. Failure to report may result in substantial civil and criminal penalties. Check state and local regulations for any additional requirements as these may be more restrictive than federal laws and regulations.

This product contains one or more components designated as hazardous substances or toxic pollutants pursuant to the Federal Clean Water Act (40 CFR 116.4 Table A; 40 CFR 401.15). Any unpermitted introduction of this product into a facility stormwater or wastewater discharge may constitute a violation of the Clean Water Act. Facilities must notify the appropriate permitting agency prior to introducing this product into the aforementioned discharges.

This product contains one or more substances listed as hazardous, toxic or flammable air pollutants under Section 112 of the Clean Air Act.

There may be specific regulations at the local, regional or state/provincial level that pertain to this product.

STATE REGULATIONS

Based on available information this product does not contain any components or chemicals currently known to the State of California to cause cancer, birth defects or reproductive harm at levels which would be subject to Proposition 65. Reformulation, use or processing of this product may affect its composition and require re-evaluation.

SARA TITLE III RATINGS

Immediate Hazard:	X	Delayed Hazard:	X	Fire Hazard:	-	Pressure Hazard:	
Reactivity Hazard:	X						

NFPA RATINGS

Health	3	Flammability	0	Reactivity	2	Special Hazards	W
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ND = No Data NA = Not Applicable

Printed On 4/23/2002

6 / 7

Material Id 5371

Trade Name SULFURIC ACID

HMIS RATINGS

Health 3* Flammability 0 Reactivity 2

Following Ingredients of this product are listed in SARA313

SARA Listed Ingredient Name	CAS Number	Maximum %
SULFURIC ACID	7664-93-9	100.0

16 OTHER INFORMATION**DISCLAIMER**

NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. However, MSDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.

Current Revision Date 23-Apr-2002

Replaces Sheet Dated 19-Apr-2002

Completed By Safety & Emergency Response, Koch Industries, Inc.

MSDS Number: S4034 * * * * * Effective Date: 05/04/07 * * * * * Supersedes: 07/07/04

MSDS**Material Safety Data Sheet**

From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08855

M Mallinckrodt
CHEMICALS



24 Hour Emergency Telephone: 908-959-2151
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 619-496-6686

Outside U.S. and Canada
Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

SODIUM HYDROXIDE

1. Product Identification

Synonyms: Caustic soda; lye; sodium hydroxide solid; sodium hydrate

CAS No.: 1310-73-2

Molecular Weight: 40.00

Chemical Formula: NaOH

Product Codes:

J.T. Baker: 1508, 3717, 3718, 3721, 3722, 3723, 3728, 3734, 3736, 5045, 5565

Mallinckrodt: 7001, 7680, 7708, 7712, 7772, 7798

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Sodium Hydroxide	1310-73-2	99 - 100%	Yes

3. Hazards Identification

Emergency Overview

**POISON! DANGER! CORROSIVE. MAY BE FATAL IF SWALLOWED.
HARMFUL IF INHALED. CAUSES BURNS TO ANY AREA OF CONTACT.
REACTS WITH WATER, ACIDS AND OTHER MATERIALS.**

SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 4 - Extreme (Poison)

Flammability Rating: 0 - None

Reactivity Rating: 2 - Moderate

Contact Rating: 4 - Extreme (Corrosive)

Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD;
PROPER GLOVES

Storage Color Code: White Stripe (Store Separately)

Potential Health Effects

Inhalation:

Severe irritant. Effects from inhalation of dust or mist vary from mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure. Symptoms may include sneezing, sore throat or runny nose. Severe pneumonitis may occur.

Ingestion:

Corrosive! Swallowing may cause severe burns of mouth, throat, and stomach. Severe scarring of tissue and death may result. Symptoms may include bleeding, vomiting, diarrhea, fall in blood pressure. Damage may appear days after exposure.

Skin Contact:

Corrosive! Contact with skin can cause irritation or severe burns and scarring with greater exposures.

Eye Contact:

Corrosive! Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness.

Chronic Exposure:

Prolonged contact with dilute solutions or dust has a destructive effect upon tissue.

Aggravation of Pre-existing Conditions:

Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of the substance.

4. First Aid Measures

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion:

DO NOT INDUCE VOMITING! Give large quantities of water or milk if available. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact:

Immediately flush skin with plenty of water for at least 15 minutes while removing

contaminated clothing and shoes. Call a physician, immediately. Wash clothing before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Note to Physician:

Perform endoscopy in all cases of suspected sodium hydroxide ingestion. In cases of severe esophageal corrosion, the use of therapeutic doses of steroids should be considered. General supportive measures with continual monitoring of gas exchange, acid-base balance, electrolytes, and fluid intake are also required.

5. Fire Fighting Measures

Fire:

Not considered to be a fire hazard. Hot or molten material can react violently with water. Can react with certain metals, such as aluminum, to generate flammable hydrogen gas.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire. Adding water to caustic solution generates large amounts of heat.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust. Do not flush caustic residues to the sewer. Residues from spills can be diluted with water, neutralized with dilute acid such as acetic, hydrochloric or sulfuric. Absorb neutralized caustic residue on clay, vermiculite or other inert substance and package in a suitable container for disposal.

US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

7. Handling and Storage

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Always add the caustic to water while stirring; never the reverse. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product. Do not store with aluminum or magnesium. Do not mix with acids or organic materials.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

- OSHA Permissible Exposure Limit (PEL):

2 mg/m³ Ceiling

- ACGIH Threshold Limit Value (TLV):

2 mg/m³ Ceiling

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator.

WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

White, deliquescent pellets or flakes.

Odor:

Odorless.

Solubility:

111 g/100 g of water.

Specific Gravity:

2.13

pH:

13 - 14 (0.5% soln.)

% Volatiles by volume @ 21C (70F):

0

Boiling Point:

1390C (2534F)

Melting Point:

318C (604F)

Vapor Density (Air=1):

> 1.0

Vapor Pressure (mm Hg):

Negligible.

Evaporation Rate (BuAc=1):

No information found.

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage. Very hygroscopic. Can slowly pick up moisture from air and react with carbon dioxide from air to form sodium carbonate.

Hazardous Decomposition Products:

Sodium oxide. Decomposition by reaction with certain metals releases flammable and explosive hydrogen gas.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Sodium hydroxide in contact with acids and organic halogen compounds, especially trichloroethylene, may causes violent reactions. Contact with nitromethane and other similar nitro compounds causes formation of shock-sensitive salts. Contact with metals such as aluminum, magnesium, tin, and zinc cause formation of flammable hydrogen gas. Sodium hydroxide, even in fairly dilute solution, reacts readily with various sugars to produce carbon monoxide. Precautions should be taken including monitoring the tank atmosphere for carbon monoxide to ensure safety of personnel before vessel entry.

Conditions to Avoid:

Moisture, dusting and incompatibles.

11. Toxicological Information

Irritation data: skin, rabbit: 500 mg/24H severe; eye rabbit: 50 ug/24H severe; investigated as a mutagen.

-----\Cancer Lists\-----

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Sodium Hydroxide (1310-73-2)	No	No	None

12. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Domestic (Land, D.O.T.)**Proper Shipping Name:** SODIUM HYDROXIDE, SOLID**Hazard Class:** 8**UN/NA:** UN1823**Packing Group:** II**Information reported for product/size:** 300LB**International (Water, I.M.O.)****Proper Shipping Name:** SODIUM HYDROXIDE, SOLID**Hazard Class:** 8**UN/NA:** UN1823**Packing Group:** II**Information reported for product/size:** 300LB

15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----

Ingredient	TSCA	EC	Japan	Australia
Sodium Hydroxide (1310-73-2)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----

Ingredient	Korea	DSL	NDSL	Phil.
Sodium Hydroxide (1310-73-2)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----

Ingredient	-SARA 302- RQ	TPQ	--Canada-- List	-SARA 313- Chemical Catg.
Sodium Hydroxide (1310-73-2)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----

Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)
Sodium Hydroxide (1310-73-2)	1000	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
 SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No
 Reactivity: Yes (Pure / Solid)

Australian Hazchem Code: 2R

Poison Schedule: S6

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: 3 Flammability: 0 Reactivity: 1

Label Hazard Warning:

POISON! DANGER! CORROSIVE. MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED. CAUSES BURNS TO ANY AREA OF CONTACT. REACTS WITH WATER, ACIDS AND OTHER MATERIALS.

Label Precautions:

Do not get in eyes, on skin, or on clothing.

Do not breathe dust.

Keep container closed.

Use only with adequate ventilation.

Wash thoroughly after handling.

Label First Aid:

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and

shoes. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. In all cases get medical attention immediately.

Product Use:

Laboratory Reagent.

Revision Information:

No Changes.

Disclaimer:

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Prepared by: Environmental Health & Safety
Phone Number: (314) 654-1600 (U.S.A.)

SAFETY DATA SHEET**ABC 3 ANTIFOULING****1. Identification of the preparation and of the company**

Product name : ABC 3 ANTIFOULING
SDS no. : M-V0283SA
Area of application : For professional use only.
Product use : TIN FREE SELF POLISHING ANTIFOULING
Supplier/Manufacturer : Ameron B.V.
 Performance Coatings & Finishes
 J.F.Kennedylaan 7
 P.O. Box 6, 4190 CA, Geldermalsen
 The Netherlands

Telephone no. : +(31) 345 587 587
Fax no. : +(31) 345 587 551
Emergency telephone number : +(31) 345 587 587

2. Composition information on ingredients

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC.

Chemical name*	CAS number	%	EC number	Classification
dicopper oxide	1317-39-1	25 - 50	215-270-7	Xn; R22 N; R50/53
zinc oxide	1314-13-2	10 - 25	215-222-5	N; R50/53
Colophony	8050-09-7	2.5 - 10	232-475-7	R43
2-Methylpropan-1-ol	78-83-1	2.5 - 10	201-148-0	R10 Xi; R37/38, R41 R67
Xylene	1330-20-7	2.5 - 10	215-535-7	R10 Xn; R20/21 Xi; R38
ziram (ISO)	137-30-4	2.5 - 10	205-288-3	T+; R26 Xn; R22, R48/22 Xi; R37, R41 R43
Ethylbenzene	100-41-4	1 - 2.5	202-849-4	N; R50/53 F; R11 Xn; R20
See section 16 for the full text of the R-phrases declared above				

Occupational exposure limits, if available, are listed in section 8.

3. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R10
 T; R23
 Xn; R22
 Xi; R41
 R43
 N; R50/53

Physical/chemical hazards : Flammable.

Human health hazards : Harmful if swallowed.
 Toxic by inhalation.
 Risk of serious damage to eyes.
 May cause sensitisation by skin contact.

Environmental hazards : Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

4. First-aid measures

First-aid measures

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by mouth. If unconscious, place in recovery position and seek medical advice.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do not use solvents or thinners.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do not induce vomiting.

5. Fire-fighting measures

- Extinguishing media** : Recommended: alcohol-resistant foam, CO₂, powders, water spray.
Not to be used : water jet.
- Recommendations** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required. Cool closed containers exposed to fire with water. Do not release runoff from fire to sewers or waterways.

6. Accidental release measures

- Personal precautions** : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.
- Spill** : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Do not allow to enter drains or watercourses. Preferably clean with a detergent. Avoid using solvents. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

Note: see section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

- Handling** : Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.
- In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.
- To dissipate static electricity during transfer, earth drum and connect to receiving container with bonding strap. Operators should wear antistatic footwear and clothing and floors should be of the conducting type.
- Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used.
- Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this preparation. Avoid inhalation of dust from sanding.
- Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
- Put on appropriate personal protective equipment (see section 8).
- Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one.
- Comply with the health and safety at work laws.

7 Handling and storage

Storage

ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

- : Store in accordance with local regulations. Observe label precautions. Store between 5 to 40°C (41 to 104°F). Store in a cool, well-ventilated area away from incompatible materials and ignition sources.

Keep away from: oxidising agents, strong alkalis, strong acids.
No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Do not empty into drains..

8 Exposure controls/personal protection

Engineering measures

- : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
2-Methylpropan-1-ol	EH40-WEL (United Kingdom (UK), 1/2005). STEL: 231 mg/m ³ 15 minute/minutes. Form: All forms STEL: 75 ppm 15 minute/minutes. Form: All forms TWA: 154 mg/m ³ 8 hour/hours. Form: All forms TWA: 50 ppm 8 hour/hours. Form: All forms
Xylene	EH40-WEL (United Kingdom (UK), 1/2005). Skin STEL: 441 mg/m ³ 15 minute/minutes. Form: All forms STEL: 100 ppm 15 minute/minutes. Form: All forms TWA: 220 mg/m ³ 8 hour/hours. Form: All forms TWA: 50 ppm 8 hour/hours. Form: All forms
Ethylbenzene	EH40-WEL (United Kingdom (UK), 1/2005). Skin STEL: 552 mg/m ³ 15 minute/minutes. Form: All forms STEL: 125 ppm 15 minute/minutes. Form: All forms TWA: 441 mg/m ³ 8 hour/hours. Form: All forms TWA: 100 ppm 8 hour/hours. Form: All forms

Personal protective equipment

Respiratory system

- : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flattening should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

Skin and body

- : Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres.

Hands

Gloves

- : For prolonged or repeated handling, use gloves: nitrile.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Eyes

- : Use safety eyewear designed to protect against splash of liquids.

Environmental exposure controls

Do not allow to enter drains or watercourses.

9 Physical and chemical properties

Physical state	: Liquid.
odour	: Solvent.
Colour	:
Flash point	: Closed cup: 25°C (77°F). (Setaflash.)
Viscosity	: 100 - 120 KU @ 25°C ASTM D-562
Relative density	: 1.95 g/cm ³ (25°C / 77°F)
Vapour density	: 2.6 (Air = 1)

ABC 3 ANTIFOULING

9. Physical and chemical properties

Vapour pressure	: 10.7 kPa (80.3 mm Hg) (at 20°C)
Solubility	: Insoluble in cold water, hot water.
Auto-ignition temperature	: The lowest known value is 414.85°C (778.7°F) (2-Methylpropan-1-ol).

10. Stability and reactivity

Stable under recommended storage and handling conditions (see section 7).

Hazardous decomposition products: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

11. Toxicological information

There is no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 2 and 15 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage.

Contains (Colophony, ziram (ISO)). May produce an allergic reaction.

12. Ecological information

There is no data available on the preparation itself.
Do not allow to enter drains or watercourses.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See Sections 2 and 15 for details.

Ecotoxicity data

Product/ingredient name	Species	Period	Result
zinc oxide	Daphnia magna (EC50)	48 hour/hours	>1000 mg/l
	Oncorhynchus mykiss (LC50)	96 hour/hours	1.1 mg/l
2-Methylpropan-1-ol	Lepomis macrochirus (LC50)	96 hour/hours	>320 mg/l
	Pimephales promelas (LC50)	96 hour/hours	2246 mg/l
	Scenedesmus subspicatus (EC50)	48 hour/hours	230 mg/l
	Daphnia pulex (EC50)	48 hour/hours	1100 mg/l
	Scenedesmus subspicatus (EC50)	48 hour/hours	1250 mg/l
	Oncorhynchus mykiss (LC50)	96 hour/hours	1330 mg/l
Xylene	Pimephales promelas (LC50)	96 hour/hours	1430 mg/l
	Pimephales promelas (LC50)	96 hour/hours	1510 mg/l
	Oncorhynchus mykiss (LC50)	96 hour/hours	3.3 mg/l
	Oncorhynchus mykiss (LC50)	96 hour/hours	8.2 mg/l
	Lepomis macrochirus (LC50)	96 hour/hours	8.6 mg/l
	Lepomis macrochirus (LC50)	96 hour/hours	12 mg/l
ziram (ISO)	Lepomis macrochirus (LC50)	96 hour/hours	13.3 mg/l
	Pimephales promelas (LC50)	96 hour/hours	13.4 mg/l
	Daphnia magna (EC50)	48 hour/hours	0.048 mg/l
	Pimephales promelas (LC50)	96 hour/hours	0.008 mg/l
	Lepomis macrochirus (LC50)	96 hour/hours	0.0097 mg/l
	Oncorhynchus mykiss (LC50)	96 hour/hours	0.27 mg/l
	Poecilia reticulata (LC50)	96 hour/hours	0.75 mg/l

ABC 3 ANTIFOULING

12 Ecological information

Ethylbenzene	(LC50)		
	Daphnia magna (EC50)	48 hour/hours	2.93 mg/l
	Daphnia magna (EC50)	48 hour/hours	2.97 mg/l
	Selenastrum capricornutum (EC50)	48 hour/hours	7.2 mg/l
	Oncorhynchus mykiss (LC50)	96 hour/hours	4.2 mg/l
	Pimephales promelas (LC50)	96 hour/hours	9.09 mg/l
	Poecilia reticulata (LC50)	96 hour/hours	9.6 mg/l

13 Disposal considerations

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

14 Transport information

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Land - road/railway

UN number : UN1263
 Transport document name : Paint.
 Special provision 640 : E
 ADR/RID Class : 3
 Hl/Kemler number : 30
 Packing group : III
 ADR/RID Label : Exempted according to 2.2.3.1.5 (Viscous substance exemption)



Sea

UN number : UN1263
 Proper shipping name : Paint.
 IMDG Class : 3
 Packing group : III
 IMDG Label : Exempted according to 2.3.2.5 (Viscous substance exemption)



Marine pollutant : No.
 Emergency schedules (EmS) : F-E, S-E

Air

UN number : UN1263
 Proper shipping name : Paint.
 ICAO/IATA Classification : 3
 Packing group : III
 ICAO/IATA label :



15. Regulatory information

EU regulations

: The product is classified and labelled for supply in accordance with the Directive 1999/45/EC as follows:

Hazard symbol/symbols



Toxic, Dangerous for the environment.

Risk phrases

: R10- Flammable.
R23- Toxic by inhalation.
R22- Harmful if swallowed.
R41- Risk of serious damage to eyes.
R43- May cause sensitisation by skin contact.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases

: S23- Do not breathe vapour / spray.
S24- Avoid contact with skin.
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39- Wear suitable gloves and eye/face protection.
S38- In case of insufficient ventilation, wear suitable respiratory equipment.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Contains

: dicopper oxide
Colophony
ziram (ISO)

Industrial use

: The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

This product does not contain organotin compounds acting as biocides and complies with the International Convention on the Control of Harmful Anti-fouling Systems as adopted by IMO in October 2001 (IMO document AFS/CONF/26)

Type of Antifouling System: Tin free self-polishing

Name of manufacturer: Ameron International

Name of paint: ABC3 Antifouling

Note: This name is shown on the product container. All Ameron International product containers carrying this name, comply with the IMO Convention (AFS/CONF/26). This applies to all colours of this product.

Active ingredient(s): Ziram (CAS no. 137-30-4)
Dicopperoxide (CAS no. 1317-39-1)

16. Other information

CEPE Classification

: 1

Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK)

: R11- Highly flammable.
R10- Flammable.
R26- Very toxic by inhalation.
R23- Toxic by inhalation.
R20- Harmful by inhalation.
R20/21- Harmful by inhalation and in contact with skin.
R22- Harmful if swallowed.
R48/22- Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R37- Irritating to respiratory system.
R37/38- Irritating to respiratory system and skin.
R38- Irritating to skin.
R41- Risk of serious damage to eyes.
R43- May cause sensitisation by skin contact.
R67- Vapours may cause drowsiness and dizziness.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The information in this Safety Data Sheet is required pursuant to EU Directive 91/155/EEC and its amendments.

Date of printing : 2/2/2006.

Date of issue : 1/17/2006.

16. Other information**Notice to reader**

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.