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UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE ADMINISTRATOR

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IN THE MATTER OF	)	
	)	
UNIVERSAL CIRCUITS, INC.,	)	Docket No. CWA-IV-88-001
	)	
Respondent	)	

Federal Water Pollution Control Act (Clean Water Act) 33 U.S.C. §§ 1251-1387. Respondent found in violation of pertinent provision of same and implementing regulations.

1. If procedures used for sampling are found sufficiently reliable, then samples are representative of respondent's wastewater.

2. A violation embraces all the days involved in the time period where wastewater limitations are exceeded.

3. Economic benefit purportedly accruing to respondent for noncompliance will not be assessed in calculating total penalty where complainant refuses, upon request, to provide respondent with the data concerning how the economic benefit figure was calculated.

4. Amount of penalty is required to be reduced by any amount respondent paid in penalties to the local government for same violations.

INITIAL DECISION

By: Frank W. Vanderheyden
Administrative Law Judge

Dated: April 11, 1990

Appearances:

For Complainant:

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INTRODUCTION

This is a proceeding brought by the U. S. Environmental Protection Agency (complainant or EPA) pursuant to Federal Water Pollution Control Act, sometimes designated as the Clear Water Act (hereinafter Act), 33 U.S.C. §§ 1251 to 1387. The administrative complaint alleges that Universal Circuits, Inc. (respondent) violated Sections 307 and 308 of Act, 33 U.S.C. §§ 1317, 1318 and by failing to comply with the General Pretreatment Regulations set forth in 40 C.F.R. Part 403; that in particular respondent failed to submit periodic reports concerning compliance from June 1984 to the date of complaint, which reports are required by 40 C.F.R. § 403.12(e). The complaint also contends that respondent violated Section 307 of the Act, 33 U.S.C. § 1317, by failing to comply with the Electroplating Point Source Category Regulations found in 40 C.F.R Part 413. It is alleged, based upon the sampling information available to EPA, that respondent failed to comply with the daily or four-day average effluent limitations for copper, lead, and total metals as required by 40 C.F.R. § 413.01, 413.84 from August 1985 and continuing to December 1987. Complainant seeks a civil penalty of $100,000. In its answer, respondent denied the alleged violations, contested the amount of penalty and requested a hearing.

To be determined here is whether or not the alleged violations are supported by the preponderance of the evidence.[1] "Preponderance of the evidence" is that degree of relevant evidence which a reasonable mind, considering the record as a whole, might accept as sufficient to support a conclusion that the matter asserted is more likely to be true than not true.

Those questions not discussed specifically herein are either rejected or viewed as not being of sufficient import for the resolution of the principal issues involved.

FINDINGS OF FACTS

Respondent is a national corporation which operates six circuit board manufacturing facilities. (Tr. 588). In 1986, it had gross sales in the neighborhood of $50,000,000, and in 1987 about $75,000,000. (Ex. C12, Tr. 77). Respondent's facility at issue is located 8801 Enterprise Boulevard, Pinellas County, Largo, Florida. It is engaged in the manufacture of printed circuit boards. (Ex. R 1; Tr. 590). Basically, the manufacturing process is as follows: Respondent purchases copper-clad laminate, which is a dielectric, or non-conductive material clad on either side with copper. The circuit board is then built to the customer's specifications or circuit design. Respondent takes the

[1]The applicable section of the Consolidated Rules of Practice (Rules), 40 C.F.R § 22.24, provides, in pertinent part, that: "Each matter in controversy shall be determined by the Presiding Officer upon a preponderance of evidence.

specifications, drills holes through the board, prints an image on it, and removes unwanted copper by means of an etcher, which is a piece of horizontal conveyorized equipment. (Tr. 384-85, 542). When the excess copper is removed from the board, it leaves a copper circuit on which various types of electrical components can be placed to be used in computers, television sets and various types of electrical equipment. Electroplating is involved in the construction of the circuit boards. (Tr. 33, 34). Manufacturing the circuit boards results in wastewater which contains various metals, including copper and lead.

By way of background, Region IV of EPA has the responsibility for administering a Pretreatment Program for Wastewater. Pinellas County (County) has a permit from EPA under the National Pollution Discharge Elimination System (NPDES). This permit requires the County to operate its Public Owned Treatment Works (POTW) in such a manner to maintain the proper effluent level in the water that the County discharges into navigable waters. The permit also requires the County to establish a local pretreatment program. In order to oversee its responsibility the County, along with other affected cities or county governments, submit annual reports to EPA. Under its EPA-approved pretreatment program, the County has the responsibility to ensure that all industries within Pinellas County Sewer System Service comply with the Act. EPA requires the County and other governmental units within the same category to issue permits, monitor, evaluate, and engage in enforcement of the permit requirements. (Tr. 31, 32).

About 1984, when respondent began its operations, it was concerned with developing a small number of circuit boards for prototyping. Since that time, its operations have grown about fivefold. (Tr. 515-16). During its incipient stages of operations, respondent attempted to eliminate specific sources of pollutants from its wastestream. Initially, it took somewhat primitive steps. Efforts were made to avoid floor spills and respondent also installed a module with fresh etching, with no copper in it, to rinse the circuit boards prior to being exposed to rinse water in the facility. Many rinses were recycled. During this time, in 1984, EPA did not charge respondent with violations of the Act. (Tr. 519-20). When respondent's operations increased, it employed additional methods to control metals in its wastewater. One of these was the installation by respondent of a drag-out tank, which was filled with water to be used as an initial rinse. (Tr. 520, 532). Another method employed by respondent was an aluminum chip pretreatment system.

Following pretreatment, metal-bearing water and water with no metal content enter an underground tank, with a grating over it, located outside the walls of respondent's facility. Nonmetal-bearing water, and metal-bearing water after pretreatment enter the tank from opposite ends. The tank's approximate dimensions are 12 feet long, 5 feet wide and 6 feet deep. Notwithstanding the suggestion made by Henry J. Bedard (Bedard), General Manager of the Largo Facility, for the tank to be placed inside the plant, it was located outside because Pat Cassidy, a member of the County's Sewer

Commission, wanted access to the tank at all times as a sampling point. The tank's capacity is about 1,000 gallons, from which all samples of wastewater were taken for analysis. From the tank the wastewater is pumped up to about three feet above the ground surface and goes into the sewer line connection by force of gravity. (Ex. R3; Tr. 65, 394, 396, 416, 523-24). Respondent discharges at least 10,000 gallons of treated wastewater daily into the County's sewer system. (Tr. 253, 440, 589).

Robert McCann (McCann) is an Environmental Engineer and Enforcement Officer employed by EPA in its Region IV (Atlanta) office. He assists Albert Herndon (Herndon), who is the coordinator for Region IV's pretreatment program. Herndon directed McCann to work with certain approved pretreatment programs in Florida, one of which was that in the County. He did not engage in actual sampling of wastewater. McCann's duties were to review annual reports from POTWs, counties and cities to determine how these entities were implementing guidelines under the pertinent regulations. He first became aware of respondent in February 1986 when he reviewed the County's pretreatment program. Following this review, McCann related to Herndon that respondent was in apparent noncompliance with the Federal categorical pretreatment standards, and that there was ostensibly significant noncompliance over a long period of time. Herndon defined "significant noncompliance" as a situation where the first basic standard was that "two-thirds of the samples are in noncompliance." (Tr. 22, 35, 36, 171, 176-78). Using the metal copper as an illustration, Herndon related that the

"Federal limit" required that the copper content in the wastewater not exceed "4.5 milligrams per liter" (mg/l), and that the "local limits [the County] have a number of 1.0 [mg/l]". (Tr. 54).[2] More specifically, the limits are as follows: For "copper" 4.5 mg/l maximum per day, or 2.7 mg/l as an average of daily values for four consecutive monitoring days. For "lead," the limits are 0.6 mg/l and 0.4 respectively. For "total metals," the limits are 10.5 mg/l and 6.8. 40 C.F.R. § 413.84(c).

McCann also visited the respondent's facility on two occasions. First, in June 1986, with personnel from the County sewer system. In the course of that visit, he met with Gary D. Ryan (Ryan), General Manager of the California Division, of respondent, and with Bedard. Among other matters discussed at that time with respondent's personnel, were the reporting requirements and minimum treatment technologies. A second visit took place in June 1987, at which time McCann was accompanied by Herndon and Suzanne Flores (Flores). The latter is an Industrial Program Manager with the County. Ryan and Bedard were also present on this date and the reporting requirements were discussed. (Tr. 178-80, 250, 380).

Some pertinent history is necessary here. By letter of July 14, 1986, complainant advised respondent that the latter was out of compliance "on a recurring basis" with Federal and local [County] limits since April 1985. Respondent was advised that it

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[2] At times, parts per million (ppm) is used interchangeably in the record with mg/l. See Exhibit C9.

had violated the Federal daily maximum limits for copper 13 times and for lead on 2 occasions; that local standards were violated 19 times; and that respondent had failed to submit biannual self-monitoring reports. Respondent was requested to appear at EPA's office on August 1, 1986 to show cause why EPA should not refer the matter to the U.S. Attorney for the initiation of civil or criminal proceedings. (Ex. C3). The longhand notes taken at that meeting by McCann, some of which are unintelligible, disclose, in pertinent part, the following: Herndon expressed his concerns at respondent's noncompliance. Ryan, for respondent, stated that he would question the validity of the County's sampling technique and procedure; that the County's limits of 1 ppm for copper were unrealistic, and he did not know of any facility that could ever meet such a standard. Herndon related that there were other cities in the State of Florida with 1 ppm limit for copper, but such municipalities may not have circuit board manufacturers as effluent contributors. He also stated the County "may need to look at its limits," but noted that the respondent was under the current limits (apparently 4.5 ppm) which were being applied to all circuit board manufacturers in the area. He also advised respondent that he "was working with the State to reevaluate these limits," but respondent would have to work toward meeting the local plus Federal limits. Ryan related that respondent was installing new equipment and it could reach 3 ppm for copper within six months. (Ex. C4 at 1, 2, 4; Tr. 128). During the meeting, respondent advised complainant that it had already issued a purchase order for new technology

concerning a pretreatment system. This was the first aluminum chip bed. At the meeting, complainant did not advise respondent that a $100,000 penalty would be proposed, and following the meeting, respondent was under the impression that only the Federal, and not the County limits would be enforced. (Tr. 432-33).

By letter of November 18, 1986, Flores advised respondent that certain items were missing from its Industrial Waste Questionnaire. Respondent was requested to submit the omitted information within 15 days of the receipt of the communication. (Ex. C17 at 1). In a certified letter of December 3, 1986, Flores advised respondent that tests of its wastewater, collected on four consecutive days in April and May 1986, disclosed violations of Federal maximum limits with regard to copper, lead and total metals. (Ex. C17 at 2-3). Another certified letter from the County, dated January 14, 1987, over the signature of Todd Tanberg, informed respondent that samples of respondent's wastewater discharge over four consecutive days from November 18 to November 21, 1986, disclosed violations of the Federal limit for copper and lead. In the communication, respondent was requested to send a written response to Flores within 10 days, indicating the expected date of completion of the planned improvements in its pretreatment system. (Ex. C17, at 4-5). On April 1, 1987, the County sent another certified letter to respondent relating that the results of a "grab" sample[3]

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[3] The date the sample was collected is unclear. At one point the letter states the sample was collected on March 6, 1987, and at another place March 5 is mentioned as the sampling date.

showed that Federal limits for copper were exceeded. (Ex. C17 at 6-7). Again, in a certified letter of June 5, 1987, from the County, respondent was informed that samples collected on April 20, 1987 showed violations of the Federal limits for lead. Also, the four-day average value standards disclosed violations for copper and lead. (Ex. C17 at 8-9).

There was a certain amount of overlapping between the County and EPA in its dealings with respondent. During the County's communications mentioned above, complainant sent a certified letter to respondent dated February 24, 1987. The respondent was requested to provide, within 30 days, a chronological list of actions taken since August, 1986, to improve its equipment and procedures for both pretreatment and self-monitoring. Additionally, respondent was to submit a self-monitoring report which would include all effluent data obtained during the previous six months, with a copy of the report sent to the County. (Ex. C5). Respondent did not submit the self-monitoring information. (Tr. 600-01). On June 23, 1987, Herndon, McCann and Flores went to the respondent's facility. Herndon toured the facility observing plant operations and pretreatment procedures and equipment. He noted that respondent had made progress since the earlier show cause meeting in that some pretreatment equipment had been installed. By letter to respondent of July 6, 1987, and with reference to the June 23, 1987 visit, Herndon noted that respondent had "made substantive progress" toward compliance with Federal limits. The respondent was also advised, however, of complainant's concerns for

what appeared to be continuing delays in its pretreatment modifications to meet Federal limits; that some process rinse waters were not being treated; and that respondent indicated previously it would send all self-monitoring data gathered since May 1, 1987. (Ex. C6; Tr. 44, 45, 179).

On September 22, 1987, complainant wrote to respondent requesting that it provide, within 30 days, the following information: (1) The chronological list of actions taken since January 1 1987, to improve the pretreatment system; (2) Self-monitoring report which includes all effluent data since January 1, 1987; (3) Cost of additional construction and equipment incurred or needed since February 1, 1987. (Ex. C7). In its letter to complainant of October 23, 1987, respondent did not furnish the self-monitoring data, but it did provide the other information. (Ex. R13; Tr. 601). During this time, respondent was sending written communications to both the complainant and the County concerning what steps it had taken toward improving its pretreatment procedures. (Exs. R6, 7, 8, 9, 10, 11, 12, 13). Though it failed to reach its goal, the documentary evidence plus the testimony of respondent's witness, Bedard, showed good faith efforts and a genuine attempt by respondent to meet pretreatment limits. (Tr. 529-51, 598).

Complainant advised respondent in a letter of November 25, 1987 that the Largo facility was out of compliance on a "recurring basis" with Federal and local standards since the show cause meeting of August 1, 1986; that Federal and local limits have been

violated with regard to copper, lead and total metals on both a daily and four-day average basis; and that such alleged violations were subject to an enforcement action pursuant to Section 309 of the Act. Respondent was invited to a show-cause meeting with complainant on December 15, 1987. (Ex. C8). The meeting, however, occurred on January 7, 1988, at which representatives of complainant, respondent and County were present. Respondent's past violations were discussed. In pertinent part, respondent related that due to improved technology, which had been operational for the past 20 days, test results showed less than 0.1 ppm on copper. During the meeting Herndon explained that EPA would probably be issuing a Class II administrative penalty order to assess a penalty in the upper range. Respondent was properly taken aback by this because it had closed its entire plant's operations for 30 days in November 1987 for the purpose of improving its pretreatment systems which included new equipment toward that end, and that it was making progress toward compliance. Respondent related that about $175,000 had been expended to improve its pretreatment. Also, it was disclosed that the County had decided to implement the 1 ppm for copper, and that EPA had agreed to that. (Ex. C9; Tr. 120, 436-37, 567).

On January 12, 1988, an administrative order (not to be confused with a Class II action seeking a penalty) was issued which required, in part, that respondent shall attain full compliance with the Federal and County limits by March 1, 1988; that respondent collect daily samples of its treated process wastewater

and analyze each sample for copper, lead and pH, with the test results submitted to EPA on the 15th of each month; and that the required sampling be done from January 25, 1988 to March 15, 1988. The results of this self-monitoring were reflected in Exhibit C20, at 1, which disclosed 12 instances, from January 27, 1988 until March 4, 1988, when limits for either copper or lead were exceeded. (Exs. C9, 10, 20; Tr. 120, 370-71, 436-37, 567). To be observed here, however, is that the complaint in this proceeding was issued on February 4, 1988, with some of the violations occurring after the date of the complaint. Other portions of Exhibit C20 tell a similar story. On February 5, 1988, the County issued a Notice of Revocation of authorization of respondent to discharge waste into the County's sewer system. (Ex. C17 at 10, 11).

Sampling procedures

No specific sampling procedure is demanded. The guidance documents of EPA reflect that sampling procedures can be done by different methods. For example, composite sampling can be either flow composite, time composite or even grab samples. The procedure used depends on the individual situation. The sampling method used by the County on the respondent's wastewater was the "time composite" sampling method (TCSM). This employs an automatic device which draws a sample from the wastewater tank prior to the discharge of the wastewater into the sewer system. The TCSM employed by the County to obtain a sample is to put a flexible tubing hose into the tank which collects a sample at 15 or 30

minute intervals over a 24 hour period, even though the facility may not be in operation during part of that period. The next day the County picks up the sample and "[w]e shake the jug" and pour the contents into a sample container which is sent to the laboratory for analysis. The sampling mechanism is either removed or reset for another day. (Ex. C16; Tr. 64-66, 256, 269-70, 345, 405).

Another sampling procedure is the flow proportional sampling method (FPSM). Unlike the TCSM, this procedure makes allowance for any variance in a facility's wastewater discharge in that the sampling in coordinate with the facility's effluent flow. Any samples taken when a facility is not in operation may be disregarded. (Tr. 406-09). For example, should the facility not be operating certain shifts, or if there is no production on weekends, there would be no wastewater being discharged and thus no turbulence in the tank. (Tr. 400). In the ideal situation, FPSM would be used where feasible; where not so, TCSM would be used. The FPSM was not used at respondent's facility because the County does not have the mechanism for measuring flow. For its own testing purposes, respondent uses TCSM. The County has attempted to get respondent to install a "primary flow measuring device" in its system, but this has not as yet materialized. (Tr. 66-67, 346-47, 351, 406-09).

Whether or not the samples taken from the tank are representative of respondent's wastewater is to some degree influenced by the liquid inside the tank, the position of the flexible hose

therein, and whether the plant is in operation so as to discharge wastewater. Herndon was under the impression that the contents of the tank were constantly mixed by the in-flow into the tank. (Tr. 66). This is not completely correct. What transpires is as follows: Both nonmetal-bearing wastewater and metal-bearing wastewater enter from opposite ends of the tank. The former requires no pretreatment. The amount, if any, and type of wastewater entering the tank, depends upon the type of operation at that time at the facility. If the facility is not operating, no wastewater enters the tank. In such a case, there is no turbulence within the tank and the liquid is of a stagnant nature. This would be the situation where the plant would not be operating three shifts on a 24 hour basis, seven days a week. At the time of the hearing, the facility was operating three shifts, but in 1985 the facility was not operating three shifts. There may also be a variation in the amount of wastewaters entering the tank, which can be as much as 100 percent. It can be "45 gallons a minute" at one time and "100 gallons a minute" at another point. (Tr. 398-400). Or a high of "110 gallons a minute" to a low of "30 gallons a minute," and at midnight perhaps "10 gallons a minute." (Tr. 450).

The County placed the flexible hose in the center of the tank near its bottom. Two suction pumps are located closer to that part of the tank where the nonmetal-bearing water enters the tank. Respondent takes the position that drawing samples by a flexible hose in the center of the tank would not yield representative

samples. Respondent's reason for this is that having the hose in the center favors the side of the tank where the metal-bearing water enters because the pumps drawing from the nonmetal side of the tank are constantly drawing the metal-bearing liquid toward the pumps, and in the direction of the sample hose located in the center of the tank. (Ex. R3; Tr. 415-417). Another argument advanced by respondent challenging the representativeness of the wastewater samples is as follows: Complainant has assumed that respondent has a continuous wastewater flow into the tank over a 24-hour period; that the plant did not operate for about eight hours in those periods when it was not on a 24 hour shift; that the plant was also not operating on weekends; that the samples taken during the time the plant was not operating were repeated samples from stagnant water; and thus such samples were not representative of a true 24 hour day of plant operation. It is urged further by respondent that the TCSM does not produce representative samples as valid as those using the FPSM. In the TCSM, it is the "luck of the draw on what operation occurred before shutting down." For example, respondent argues that if the last part of the facility's operation was that of copper-bearing wastewater the samples could show 10 ppm, but if it were averaged over a 24-hour period the facility could well be within the compliance limits (Tr. 93, 398-400, 406-07). Complainant's understanding is that the wastewater from the respondent goes essentially for 24 hours, that this results in constant churning of the liquid; and that there is little or no sediment. Complainant had not the opportunity to

examine the tank for sediment when the facility was not operating. (Tr. 93-95, 272). Respondent also attacks the sampling method used by the County on other grounds. It is stated that during those periods when the facility was not operating, sedimentation or sludge containing copper particles was on the bottom of the tank. If the flexible hose were close to the floor of the tank, suction would result in copper particles being introduced into the samples. (Tr. 404, 413-15).

At this point, it is apposite to meet the respondent's objections raised above concerning the representativeness of the samples of wastewater taken from the tank. First, the record shows that the County did not have the equipment for the FPSM, and TCSM is an accepted sampling method. Also, even if the FPSM were available, there would have to be a continuously moving stream to measure the flow. Concerning the position of the sampling hose, and sedimentation arguments raised by the respondent for its claim that the County's sampling procedure was inadequate, the following significant point is to be observed: -- the respondent itself uses the TCSM. (Tr. 346-47). Assuming, without finding, that the FPTM is more precise than the TCSM, it does not void the latter procedure. Even conceding that the method of extracting samples from the tank was not perfect, it does not invalidate them as being representative of the wastewater. Perfection in sample selection, though desirable, many times is just not obtainable in the real world for a variety of reasons. An imperfection here, or a blemish there, is not sufficient to render the wastewater samples from

respondent's tank unreliable or unrepresentative. It is found that the samples taken from the tank were representative of respondent's wastewater.

The next issue to be addressed concerns the chain of custody of the samples. Originally, the chain of custody begins in the field, where County's samplers log in information that they have collected. When the documentation is completed, the samples are taken to the County's laboratory, where the information is exchanged and the sample is signed over to the laboratory. At that point, personnel of the laboratory assume responsibility for the sample. This procedure was followed with the respondent's samples. The testing is done in the County's own laboratory, the McKay Creek Laboratory (MCL), which laboratory has been "certified." This means that the methodologies used by MCL conform to State regulations. Such a certification was received from the State of Florida on August 3, 1988. The same testing procedures were used by MCL prior to this date. Respondent did not know if the laboratory which analyzed the samples it took on its own was certified or not. (Ex. C18; Tr. 257-59, 260-61, 450).

The core of complainant's case is based essentially on two pieces of evidence. First, is Exhibit C16. This is a compilation of samples of respondent's wastewater tank taken over a period of time from April 8, 1985 to February 15, 1988. The pollutants

involved copper, lead, total metals, and pH.[4] Exhibit C16 also contains the Field Data Record and the Laboratory Parameter Evaluations pertaining to the purported violations. In brief, the first two pages of the Exhibit, in addition to the pollutant, set forth the "measured value" (results of sample tested), the Federal limit for each, the date the sample was taken, the timeframe over which sample was taken, and what percent the sample was above the Federal limit. Exhibit C16 shows a total of 86 purported violations. More specifically, 39 of the alleged violations involve copper, 26 concern lead, 11 have to do with total metals, pH is involved in 5 instances, and nonreporting violations are a like number. (Tr. 184, 192). The total number of violations is challenged by respondent, the basis of which being the number of violations that may be assigned to samples taken on a four-day timeframe. Respondent maintains that there were not 86 separate days of violation, but it concedes there were 51 such days. (Resp. Op. Br. at 22). Another document purportedly representing respondent's violations is Exhibit C20, more of which will be said below.

The documents comprising complainant's Exhibit 16, which contains the field data records and laboratory parameter evaluation

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[4] pH is a symbol for the degree of acidity or alkalinity of a solution. In this case respondent's wastewater. The value for pure distilled water is regarded as neutral; pH values from 0 to 7 indicate acidity, and pH values from 7 to 14 indicate alkalinity. Webster's New World Dictionary, Second College Edition, 1970. Low pH is undesirable and represents an "aggressive acid." (Tr.192-93). However, pH is not in issue in that it is not mentioned in the complaint.

(reports), were generated by the County's normal sampling procedure and an ongoing process. Stated another way, the documentation on complainant's Exhibit 16 was produced in the County's regular course of its business. (Tr. 331-32).

As part of the NPDES program, EPA requires local governments to send to it discharge monitoring reports each quarter, which reports are used in determining whether a POTW is conforming to permit limits. One such report is entitled Performance Evaluation Report, dated July 20, 1987, submitted to EPA by the MCL and pertains to South Cross Bayou POTW. In a performance audit inspection, EPA personnel went to the South Cross Bayou treatment plant and to the MCL. The laboratory was evaluated; it was determined by EPA that its operations were "acceptable"; and that it was satisfied with the laboratory's treatment of samples as done by the County. "Acceptance" means the laboratory had "a very good rating." (Ex. C11; Tr. 57, 59, 60).

Continuing its attack, respondent also maintains that there is not a reliable chain of custody concerning the samples. Respondent argues, with reference to complainant's Exhibit 16, that the only link between a MCL report concerning a particular sample is a handwritten number in the upper right hand corner of the field data record, which complainant witness McCann concedes appears to have been written by someone else after the sampling took place, which person was not available at the hearing. It is put forward by respondent that no control number was affixed to the sample when it was taken, and there is no proof that the MCL data relied upon

by complainant in fact resulted from samples taken from respondent's facility (Resp. Op. Br. at 13-14; Tr. 220). An examination of the record shows, however, that the concession by McCann pertains to one portion of complainant's Exhibit 16, which exhibit consists of 37 pages. McCann had the arduous task of matching up the field data record with the MCL reports. In 95 percent of the time, the number on the MCL report was the same as that on the field data record sheet. The witness was very familiar with the documentary evidence such as the field data record and the MCL reports, and could have established the nexus to the alleged violations with use of a master file page. (Tr. 221-23). McCann was forthright and candid upon examination. He was an utterly convincing witness. Notwithstanding some documentary ambiguity, McCann's testimony established the required link between the field data records and the MCL reports.

Respondent also battles with the quality of testing procedures used as the wastewater sample by MCL. (Resp. Op. Br. at 14). Respondent cites, inter alia, that EPAs Compliance Inspection Report stated that MCL had no formal quality assurance program for determining the precision and accuracy of the data it produced, and there was also an issue concerning the use of a plastic squirt bottle. (Ex. C11 at 6; Tr. 101-104). MCL testing procedures, however, were basically sound and reliable; and "met . . . essentially all requirements." (Tr. 100). Further, EPA issued Compliance Inspection Reports in which it rated laboratories from "1" to "5," with the latter being the highest obtainable. EPA gave

MCL a rating of "4," which numerical classification translated into the following: "The facility has a few minor deficiencies in one or more areas of flow monitoring, sampling, analyses or data calculating and reporting procedures . . . . The self-monitoring program is good and the deficiencies have no major impact on data reliability." (Ex. C11, at 1, 6, emphasis added).

Though the subject proceeding involves solely the questions raised in the EPA complaint, in order to have a more complete picture it is appropriate here to dwell for a moment on the County/respondent situation. From 1986 to the date of hearing, respondent paid the County fines in various small amounts from $157 to $500 for a total of $8,936 for alleged violations of federal limits. These fines were paid by respondent on a nolo contendere basis for the reasons that it was not practicable to litigate the small fines as they arose, and also because respondent did not want to take a confrontational position with the County. (Tr. 576-79). On February 5, 1988, the County sent a notice to respondent that the latter's authorization to discharge industrial waste in the County's sewer system would be revoked 14 days hence for purported continuing violations of local and Federal limits. Respondent reacted to this letter on February 9, 1988. The issue was resolved by a Pretreatment Agreement between respondent and the County dated June 14, 1988. In that document, the County agreed to accept wastewater discharges "that exceed 1.0 mg/l for copper, but at no time shall such discharges exceed 4.5 mg/l for any single 24-hour composite sample." In short, the County agreed to not enforce its

local limits for copper. The agreement also provided that respondent would purchase and install a "new sampling monitoring device," and that there would be a "modification of existing sampling point or installation of a new sampling point to provide a flow for monitoring total facility waste discharge volume" by a date certain. (Ex. C17 at 11, 12, R18 at 2, 3; Tr. 572-73).

Returning to the EPA complaint, on January 12, 1988, EPA issued an administrative order pursuant to Section 309(a) of the Act, 33 U.S.C. § 1319(a). The order stated that respondent failed to demonstrate compliance with the Federal and local limits, and that it failed to submit data to show compliance with total toxic organic limits. The order further directed respondent to attain full compliance with federal and local limits by March 1, 1988; that respondent should collect daily samples of treated process wastewater from January 25, 1988, and analyze each sample for copper, lead and pH; and that results shall be submitted on the 15th day of each month, beginning March 15, 1988. (Ex. C10 at 2). The order could only have had prospective application in that the complaint in this proceeding was issued on February 4, 1988.

Respondent conceded that it was aware of the Act and the restrictions placed on the discharge of wastewater into publicly owned treatment works; that it was cognizant of the pretreatment regulations and their specific application to electroplaters; that respondent engages in that type of enterprise; that it generated more than 10,000 gallons a day of treated wastewater; that it, as an electroplater, was to be in compliance with the discharge limits

in 1984; the aluminum chip process mentioned earlier was not installed until 1987; and that it was in periodic noncompliance since 1984 to the time of the hearing. Even though respondent was of the view that the County's sampling procedure was inadequate, it did not challenge the County in this regard, apparently for the reasons mentioned by Bedard, above. (Tr. 440-42, 459). Respondent admitted its failure to resubmit biannual reports for the years 1985, 1986, and 1987, and it conceded further that it did not respond to certain requests of complainant for self-monitoring information. (Tr. 591, 600-01). Disregarding the pH violations, it is found that respondent exceeded the Federal limits for copper, lead, or total metals on 76 occasions, and it failed to make required reports in at least five instances, for a total of 81 infractions.

Penalty Findings

The basis for complainant's proposed penalty rests in its Exhibits 13 and 15. The former is complainant's Penalty Policy and the latter is the Penalty Summary Worksheet. The penalty procedures and calculations were, in brief, as follows: Complainant multiplied the 86 purported violations by $10,000 for a total of $860,000 (This figure, of course, exceeded the statutory limit of $125,000.) Complainant employed a computerized method to determine any possible economic benefit respondent may have realized by not installing pretreatment equipment within a certain time. This economic benefit (BEN) was calculated at

$47,000. Complainant sent respondent a copy of the Penalty Policy and agreed to provide a witness to explain the penalty calculations, which it did by witness Herndon. Respondent requested the computer model formula that calculated the BEN or the actual work papers concerning the penalty. Complainant declined to produce this information, but it related the procedure and method used. The reason for complainant's declination, in pertinent part, was that it was EPA's policy not to give specific numbers. (Tr. 145, 160-63). No privilege concerning nondisclosure was asserted by complainant. Computer figures showing economic calculations and variables were provided by complainant by order of the Administrative Law Judge (ALJ) during the hearing in the form of complainant's Exhibit 15. (Tr. 157-58). However, complainant did not provide the data showing how it arrived at the conclusionary figures on page three of that Exhibit.

The gravity figure of $150,000 on page one of complainant's Exhibit 15 hinged upon the numerical weights assigned to factors A, B, C, & D, plus 1. The nature and weight of the gravity factors is set out in the Penalty Policy. The Penalty Policy is supposedly "designed to promote a more consistent, Agency-wide approach to the assessment of civil penalties while allowing substantial flexibility for individual cases within certain guidelines." (Ex. C13 at 1, 4, 5). "A," the "Significance of Violation Factor," has a certain degree of objectivity to it as it is based upon the percent by which the pollutant exceeds the permit limitation. This factor contained numerical variations from 3 to 20 for various

months. Factor "B" could vary from 1 to 10, with the latter being the statutory maximum, with the criteria being "present actual or potential harm to human health as the environment." This factor received consistently the lowest rating of "1," showing that in EPA's judgment the respondent's violations were minimal concerning this standard. Factor "C" is the "Number of Violations" in a given month. Its value varies from zero to five. Factor "D" is concerned with the "Duration of Noncompliance," with a range of values of zero to four. (Ex. C15 at 2).

The penalty policy also contains adjustment factors. These are: (A) History of Recalcitrance, to increase the penalty; (B) Ability to Pay, to decrease the penalty, and (C) Litigation Considerations, which can also be employed to decrease the penalty. This adjustment factor also speaks of "equitable considerations" and relates, in pertinent part, the following: "Examples of equitable consideration which may lead to adjustment of the penalty amount include the following: whether the defendant reasonably, conclusively and detrimentally relied on EPA's or state or local agency's representations or actions; . . ." Footnote 11 of the penalty policy provides that "the penalty should be reduced by any amount which defendant paid as a penalty to a State or local agency as the same violations." The penalty policy concludes with the following thought: "The policies and procedures set out in this document are intended solely <u>for the guidance</u> of government personnel . . . ." (emphasis supplied). (Ex. C13 at 8).

Concerning the ability to pay adjustment factor, the Largo facility, a division of the corporate respondent, experienced an operating loss of $973,420, $815,204 and $883,702 for the years 1984, 1985, and 1986, respectively. In 1987, it realized a net income of $216,059 before taxes. (All figures rounded.) Notwithstanding this financial improvement, a $100,000 penalty would tend to exacerbate the respondent's Largo Division's present unstable financial condition. (Exs. R19, 20, 21, 22; Tr. 585-86).

Staying with the Penalty Summary Worksheet, the BEN plus the gravity factor came to $197,000. Complainant added a 50 percent recalcitrant factor of $98,500, for a total of $295,500. This was followed by a downward adjustment of $195,000. The rationale for the latter being that if EPA took another judicial route, instead of the present administrative proceeding, litigation costs were estimated to be $195,500. The proposed penalty of $100,000 was arrived at by subtracting $195,500 from $295,500. (Exs. C13, 15; Tr. 74-82, 355-65). The testimony Herndon, complainant's witness, is singularly telling concerning the penalty calculations.

> Now I would like to add one statement. Any one person can do these calculations. Any one of the persons in this hearing room could go through and do the same calculations with the same figures, and there's a good possibility that each of us may come up with some different figures here . . . . but the point in much of the factors in this are subjective. . . . . And as you notice, the largest adjustment is the litigation consideration, and anybody who wants to use $100,000 or $300,000 for litigation could do so. That is a difficult number to come by because you are projecting a lot of unknowns there. (Tr. 363-64).

It is found that complainant's failure to provide respondent with the basis of the BEN calculation, plus the highly subjective nature of the overall penalty calculations calls into question the validity of the proposed penalty.

DISCUSSION AND CONCLUSIONS OF LAW

Section 307(d) of the Act, 33 U.S.C. § 1317(d) provides that:

> After the effective date of any effluent standard or prohibition or pretreatment standard promulgated under this section, it shall be unlawful for any owner or operator of any source to operate any source in violation of any such effluent standard or prohibition or pretreatment standard.

"Source" is defined to mean "any building, structure, facility, or installation from which there is or may be the discharge of pollutants." Section 306(a)(3), 33 U.S.C. § 1316(a)(3).

The Federal regulations concerning effluent and pretreatment standards and pertaining to the category of electroplating point source are found in 40 C.F.R. Part 413, which Part is applicable to "electroplating operators." 40 C.F.R. § 413.01(a). The compliance date was April 27, 1984. (Tr. 194). More specifically, for printed circuit board facilities discharging 10,000 gallons or more per calendar day of electroplating process wastewater, certain mg/l limits are prescribed, as stated in the Findings.

In its answer to the complaint, at 2, respondent admits that it is engaged in electroplating and circuit board manufacturing and that it generates more than 10,000 gallons a day of "non-domestic" (industrial) pollutants which it discharges into the County's sewer

system. The findings support the conclusion that respondent is subject to the pretreatment regulations as they apply to circuit board manufacturers.

The regulations provide further that any industrial user of a categorical pretreatment standard, as respondent is, beginning in 1984, shall submit biannual reports indicating "the nature and concentration of pollutants in the effluent which are limited by such categorical Pretreatment Standards." 40 C.F.R. § 403.12(e).

Notwithstanding the challenges made by respondent concerning the sampling method, the chain of custody and testing procedures, from the evidence discussed in the Findings, it is concluded that the procedures used by complainant were sufficiently reliable and it has established by the preponderance of the evidence that respondent exceeded the Federal limits for copper, lead, or total metals, the three pollutants stated in the complaint. It is concluded further that respondent was in violation for not submitting periodic reports as required by the regulations. The respondent's argument that its noncompliance was not of a constant and continuing nature does not relieve it from liability under the Act. Such considerations perhaps may go to the amount of penalty but not to the liability issue. It is concluded that respondent violated Section 307 of the Act, 33 U.S.C § 1317, and 40 C.F.R. § 413.84(c), on 76 occasions, from August 1985 through February 1988. It is concluded further that respondent violated Section 307 and 308 of the Act, 33 U.S.C § § 1317, 1318, and 40 C.F.R. § 403.12(e), at least five times for failure to submit required reports.

Penalty Conclusions

The very heart of this matter, and perhaps the most agonizing question posed concerns what would be a condign penalty for the violations. The Act provides for Class I and Class II types of proceedings and penalties. Class II penalties, involved here, provide that the penalty shall not exceed $10,000 per day for each day the violation continues, except that the maximum amount of any penalty shall not exceed $125,000. Section 309(g)(2)(B), 33 U.S.C. § 1319(g)(2)(B). As guidance for the penalty amount, the pertinent provision of the Act, Section 309(g)(3), 33 U.S.C. § 1319(g)(3) provides:

> In determining the amount of any penalty . . . the Administrator . . . , shall take into account the nature, circumstances, extent and gravity of the violation, and, with respect to the violator, ability to pay, any prior history of such violations, the degree of culpability, economic benefit, or savings (if any) resulting from the violation, and such other matters as justice may require . . . .

The Rules are applicable to proceedings under Section 309(g) of the Clean Water Act for the assessment of penalty. 40 C.F.R. § 22.01(a)(6). Where liability exists, the ALJ shall determine the dollar amount of civil penalty in accordance with any criteria set forth in the Act. In addition, the ALJ is required to consider any civil penalty policy or guideline issued under the Act. Further, if the ALJ decides to assess a penalty different in amount from the penalty recommended to be assessed in the complaint, the specific reason for such increase or decrease shall be set forth in the initial decision. 40 C.F.R. § 22.27(b).

One of the assaults made by respondent on the proposed penalty amount is that at a time prior to the issuance of the complaint there was some discussion with EPA concerning whether the penalty to be proposed in the complaint would be less than $100,000. (Tr. 232)[5]. That the complainant may have considered a penalty figure of less than $100,000 before the issuance of the complaint does not invalidate the proposed penalty of $100,000. However, it lends support to the degree of subjectivity in which complainant may have engaged, and perhaps some indecision it experienced, in arriving at the final proposed penalty of $100,000.

Respondent also argues that there were 51, not 86 violations as contended by complainant. (The ALJ has found 81 violations, Supra at 25.) It is contended that "EPA essentially counted two, three, or sometimes four times the same sampling event in order to calculate the maximum penalty." (Resp. Op. Br. at 22, emphasis added). The pertinent regulations speak of limits for a four day average. 40 C.F.R. § 413.84(c). The complainant's method in calculating the penalties was correct. A violation necessarily embraces all the days involved in the time period covered by the limitation. United States v. Amoco Oil Company, 580 F.Supp. 1042, 1044-1046. (W.D. Mo., 1985); Chesapeake Bay Foundation v. Gwaltney of Smithfield, Ltd, 791 F.2d 304, 313-316 (4th Cir. 1986).

In the last analysis, the determination of the penalty amount rests with the ALJ sifting and weighing the evidence against the

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[5] Such evidence is to be distinguished from offer of settlement which would not be admissible. 40 C.F.R § 22.22.

elements set forth in Section 309(9)(g)(3), as refined, expanded upon, and purportedly explained in the Penalty Policy. In this regard, "The policies and procedures set out in this document [Penalty Policy] are intended solely for the guidance of government personnel. They are not intended, and cannot be relied upon, to create any rights, substantive or procedural, enforceable by any party in litigation with the United States." (Ex. C13 at 8). The Penalty Policy is not a regulation duly promulgated pursuant to a statute. Even if this were the case, regulations are designed to supplement not supplant statutes. The elements in the complainant's penalty calculation must be laid alongside the standards set out in the Act and in the Penalty Policy. If there is a conflict, the Penalty Policy must yield.

Economic Benefit:

Both the Act and penalty policy speak of economic savings as benefits resulting from the violations. In the context of the facts of this case, few wickets could be stickier. The figure of $47,000 is suspect. (No privilege was asserted by complainant concerning the information; even if it were no ruling regarding same is made here.) A respondent is entitled legally to know the data in support of this amount in order to answer same. EPA cannot take the position that the figure came down in lapidary form from Mt. Sinai. If EPA wants its BEN figure considered to any degree, it must, when requested, disgorge the information that ostensibly supports it. In not being provided with the data in support of the

$47,000 BEN calculation, the respondent makes a trenchant argument that it was at a disadvantage in challenging this figure. (Resp. Op. Br. at 22). The penalty amount is a "matter of controversy" and the complainant has the burden of proving that the proposed civil penalty is "appropriate." 40 C.F.R. § 22.24. Significantly, complainant did not come to grips on brief with its nondisclosure concerning the BEN question. In a feckless attempt to support the $47,000 amount, complainant's brief brims with ambiguity. It states, without specifics, that respondent had the benefit of resources since 1985, which it did not devote to compliance. (Comp. Op. Br. at 25). The issue is again avoided in complainant's reply brief at 15, 16, where it is stated merely that the penalty assessment is based, in part, upon "internal policies" or "internal EPA penalty policy material." Such blanket and empty statements simply will not do. Also to be considered is the finding that the respondent was making good faith efforts toward compliance, expended $175,000 for pretreatment equipment, and had closed its entire operations for 30 days. Supra at 12, 13. For the reasons stated above, it is concluded that complainant failed to carry its burden concerning the $47,000 BEN amount as being "appropriate." It should be disregarded in its entirety.

Nature, Circumstances, Extent and Gravity of Violations

This consideration is found both in the Act and Penalty Policy. More than merely the number of violations is to be considered here, namely 76 violations extending intermittently from

April 1985 to February 1988, and the five violations for not submitting reports. The complainant's explanation of how it arrived at the total gravity amount of $150,000, as set out above in the Findings, is well-founded and is supported by the preponderance of the evidence. It is concluded that the gravity figure should be $150,000. This is the penalty at this stage of the calculations.

The penalty policy mentions a "recalcitrance factor." Complainant increased the penalty by 50 percent because of this. (C15 at 1). The Act does not mention the word "recalcitrance," but it does mention "culpability." The adjective "recalcitrant" is defined, in pertinent part, as "refusing to obey authority, custom, regulation, etc., stubbornly defiant; hard to deal with." "Culpable" is defined as "deserving blame; blameworthy."[6] It is not necessary to get involved with semantics or an exegesis here. Perhaps "culpability factor" instead of "recalcitrance factor" may be the better phrase to use. However, the words are sufficiently close in import that "culpable" could embrace "recalcitrant" and complainant is not to be faulted for using "recalcitrance factor." The question is whether or not on a scale from 0-150 percent the evidence justifies an upward adjustment of 50 percent for an amount of $75,000. The ALJ concludes that it does. The record is clear that respondent was culpable in not submitting required reports. These failures were not random events. This or any other complainant situated similarly is not required to exercise the

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[6] Webster's New World Dictionary, 344, 1184 (13th ed. 1970).

patience of unanswered prayer before seeking enforcement. The reports are necessary to carry out statutory duties, and respondent's failure in this regard is a remora to the EPA's mission. With a recalcitrant factor of 50 percent, the subtotal of the penalty is now $225,000.

The penalty policy summary worksheet then uses a figure of $195,500 as a reduction in the penalty based upon "Litigation Considerations." The tortured question is the reliability of the figure. One is led ineluctably to conclude that the $195,500 is a luminous example of subjectivity. However, in the absence of pertinent evidence, it is difficult to conclude that this figure should be otherwise, and the ALJ is disinclined to substitute his subjectivity for that of complainant. He will defer to complainant's judgment in this matter and leave the amount unchanged. The subtotal figure for the penalty is now $30,000.

The ability to pay question is analogous to an affirmative defense. In that respondent would more likely be the possessor of evidence concerning this issue, the burden rests with respondent to establish its inability to pay the penalty proposed and why a reduction in same is necessary; it is not for complainant to establish respondent's ability to pay. The respondent is a division of a viable, profitable enterprise. Its parent corporation, who is legally responsible for the Largo Division operation, cannot insulate itself from the liabilities of its Division. Assuming, without concluding, that only the Largo Division should be responsible for the penalty, the record shows

that while previous years were bleak, beginning in 1987, the Division began to realize some profit. It concluded that respondent has the ability to pay the penalty set out in the order accompanying this decision.

The Act also requires that in a penalty calculation there should be taken into account "such other matters as justice may require." It is concluded that the Penalty Policy reflects this, in part, where it provides that the penalty should be reduced by "any amount which defendant paid on a penalty to a State or local agency on the same violations." (Ex. C13, at 14, fn. 11). Therefore, from the figure of $30,000, an amount of $8,936 should be deducted, which was the total paid in penalties to the County for violations, leaving a reduced and final penalty figure of $21,064.

ULTIMATE CONCLUSION

Respondent has violated Sections 307 and 308 of the Clean Water Act, 33 U.S.C. 1317, 1318, and 40 C.F.R. §§ 403.12(e), 413.01, and 413.84.

ORDER [7]

Pursuant to Section 309 of the Federal Water Pollution Control Act, 33 U.S.C. § 1319, the following order is issued against respondent Universal Circuits, Inc.

a. A civil penalty of $21,064 is assessed against the respondent for its violations.

b. Payment of the civil penalty shall be made by submitting a cashier's or certified check payable to the Treasurer, United States of America, and mailed to:

EPA - Region IV
(Regional Hearing Clerk)
P.O. Box 100142
Atlanta, GA 30384

c. Payment shall be made within sixty days (60) after receipt of the final order. Failure upon part of respondent to pay the penalty within the prescribed statutory time frame after entry of the final order may result in the assessment of interest on the civil penalty. 31 U.S.C. § 3717; 4 C.F.R. § 102.13.

Frank W. Vanderheyden
Administrative Law Judge

Dated: April 11, 1990

[7] Unless an appeal is taken pursuant to the Rules of Practice, 40 C.F.R § 22.30, or the Administrator elects to review this decision on his own motion, the Initial Decision shall become the final order of the Administrator. 40 C.F.R. § 22.27(c).

IN THE MATTER OF UNIVERSAL CIRCUITS, INC.,
Respondent,
Docket No. CWA-IV-88-001

Certificate of Service

I certify that the foregoing Initial Decision, dated 4/11/90, was sent this day in the following manner to the addressees below.

Original Hand Delivered to:

Ms. Bessie Hammiel
Headquarters Hearing Clerk
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Copies (5) by Certified Mail, Return Receipt Requested to:

Ms. Julia P. Mooney
Regional Hearing Clerk
U.S. Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, GA 30365

for Gladys A. Bryant
Marion I. Walzel
Secretary

Dated: April 11, 1990