

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

BEFORE THE ADMINISTRATOR

In the Matter of Cytec Industries, Inc.,)
Respondent) Docket No. V-W-009-94
)

INITIAL DECISION

Pursuant to Section 3008(a) of the Resource, Conservation and Recovery Act, 42 U.S.C. §6928(a), the Respondent Cytec Industries, Inc., is assessed a total civil penalty in the amount of \$36,500 for operating its Boiler #3 without an automatic hazardous waste feed cutoff system, in violation of 40 CFR §266.103(g), and failing to conduct Subpart BB monitoring of the equipment leading to the boiler, as required by 40 CFR §266.103(a)(4)(viii).

Appearances

For Complainant:

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For Respondent:

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Proceedings

The Region 5 Office of the United States Environmental Protection Agency (the "Complainant" or "EPA") commenced these proceedings by filing an administrative Complaint, dated February 23, 1994, against Cytec Industries, Inc., (the "Respondent" or "Cytec").(1) The Complaint charged Respondent with a series of violations of the Hazardous Waste Burned in Boilers and Industrial Furnaces ("BIF") regulations, 40 CFR Part 266, Subpart H, and the interim status standards for owners and operators of hazardous waste management facilities, 40 CFR Part 265, at its chemical manufacturing facility in Kalamazoo, Michigan. Violations of these regulations, which were promulgated pursuant to Section 3004(q) of Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. §6924(q), are subject to the assessment of civil penalties under the authority of RCRA §3008(a)(1). The Complaint proposed a civil penalty of \$417,600 for the alleged violations, and also seeks issuance of a compliance order on Respondent. In its Answer of April 1, 1994, Cytec denied most of the material allegations of the Complaint, raised certain defenses, and requested a hearing.

In an order dated July 31, 1996, the undersigned Administrative Law Judge ("ALJ") ruled on the parties cross-motions for accelerated decision. The Order entered the following rulings:

- dismissed Count I of the Complaint (failing to have an adequate waste analysis plan, contingency plan, and closure plan as required by 40 CFR §§266.103(a)(4), 265.13, 265.54, and 265.112), due to the Complainant's failure to comply with the Paperwork Reduction Act, 44 U.S.C. §3501 et seq;

- barred the assessment of civil penalties under Count II (waste analysis plan failing to adequately specify a test method and frequency for the review or repetition of the initial waste analysis, as required by 40 CFR §§265.13(b) and 266.103(a)(4)), for failure to comply with the Paperwork Reduction Act, but denying accelerated decision on liability and preserving this count for the hearing with reference to the compliance order;
- dismissed Count IV, which alleged Cytec failed to adequately specify a limit for the total feed rate of ash in its boiler's certification of compliance, in violation of 40 CFR §266.103(c)(1);
- denied accelerated decision with respect to Count III, alleging Cytec failed to monitor equipment for leaks, in violation of 40 CFR §§266.103(a)(4)(viii), 265.1052, and 265.1057;
- granted accelerated decision finding Cytec liable for the violation alleged in Count V, the failure to operate with an adequate automatic waste feed cutoff system, in violation of 40 CFR §266.103(g), reserving the issue of penalty for hearing; and,
- denied accelerated decision on Count VI, alleging Cytec failed to adequately record feed rates of ash, total chlorine and chloride to its boiler, in violation of 40 CFR §§266.103(b)(5), 266.103(c)(4), 266.103(j), and 266.103(k).

The Order thus reserved the following issues for hearing: liability under Count II; liability and penalty under Count III; penalty under Count V; and liability and penalty under Count VI. These rulings had the effect of reducing the maximum total proposed civil penalty to \$261,575, apportioned as follows: Count III - \$199,500; Count V - \$61,075; and Count VI - \$1000.

The hearing in this matter convened on October 22 through October 24, 1996, in Chicago, Illinois. The Region presented three witnesses, and the Respondent presented two witnesses. The record of the hearing consists of a stenographic transcript of 663 pages, and 43 numbered exhibits, of which 38 were received into evidence. The parties each submitted post-hearing briefs and reply briefs. The record of the hearing closed on February 18, 1997, upon the ALJ's receipt of the reply briefs.

Findings of Fact

1. Cytec operates a chemicals manufacturing facility at 2715 Miller Road in Kalamazoo, Michigan. The Kalamazoo plant manufactures industrial chemicals used in the paper, mining, water treatment, surface coating, and rubber industries. The plant's butylated melamine resins manufacturing process produces a light liquid material known as "spent alcohol" or "waste alcohol." (Ex. 20, p. B-2).(2)
2. Cytec's spent alcohol waste consists of approximately 40% n-butanol, 40% methanol, 20% water, and trace amounts of formaldehyde. Spent alcohol is classified a RCRA hazardous waste by virtue of its ignitability, and assigned EPA Hazardous Waste Number D001. It has a flashpoint of about 140F. Cytec's spent alcohol is a relatively clean fuel. The waste analysis of this material found non-detectable levels of all BIF parameters of concern, except for lead and total chlorides. These were detected at trace levels that did not raise any regulatory concern when emissions were tested for the boiler's certifications of precompliance and compliance. The fuel oil #6 that is sometimes burned with the spent alcohol in the

boiler contains generally higher levels of BIF constituents than the hazardous waste, particularly with respect to ash and chlorides. (Exs. 2, 3, 9; Tr. 101, 633).

3. Cytec operates Boiler #3 (the "boiler") to supply steam that is used to provide plant heat and energy for the plant's chemical processes. Boiler #3 is a 60,000 gallons per hour, watertube type steam boiler. Cytec burns the spent alcohol as a supplemental fuel in the boiler in conjunction with either natural gas or No. 6 fuel oil. In Mode A operation, Cytec burns 95.2% No. 6 fuel oil and 4.8% spent alcohol. In Mode B, Cytec burns 81.5% natural gas and 18.5% spent alcohol. Cytec operates in Mode B most of the time, and uses the fuel oil only when natural gas is unavailable. (Ex. 20, p. 2 of 5; Ex. 35, p. 2).

4. After its generation in the plant's manufacturing process, the spent alcohol is transported in pipes to a 12,000-gallon accumulation tank. Cytec stores the spent alcohol in that tank before transporting it in feed lines to the boiler. Cytec stores the spent alcohol in the tank for less than 90 days before it is combusted in the boiler. (Ex. 20, p. C-54a).

5. The 90-day accumulation tank is located outdoors on a concrete containment pad on the facility grounds. Waste feed lines lead from the tank to the boiler, which is housed in a concrete block building some 40 meters from the tank. There are pumps, valves and flanges on the feed lines that control and regulate the flow of spent alcohol from the tank to the boiler. The waste feed lines are one inch in diameter near the tank, and narrow to one half inch at the feed into the boiler. (Tr. Greene). This equipment is in contact with the spent alcohol hazardous waste. (Tr. 473-476; Exs. 18, 34).

6. There is also a currently unused pipe system that extends from the 12,000-gallon tank to a truck loading dock. Cytec formerly used that system to transport the spent alcohol to trucks where it was loaded for offsite disposal. (Tr. 478; Ex. 34).

7. The Cytec facility received an operating license from the Michigan Department of Natural Resources ("MDNR"), under the Michigan Hazardous Waste Management Act (Act 64), on January 11, 1989, concurrent with an EPA RCRA permit. This license authorized Cytec to operate a hazardous waste drum storage unit at the Kalamazoo facility. The drums stored used waste solvents for up to one year. The license expiration date was January 11, 1994. (Ex. 36).

8. The EPA promulgated the Hazardous Wastes Burned in Boilers and Industrial Furnaces ("BIF") rules, 40 CFR §266, Subpart H, on February 21, 1991. These rules brought the burning of hazardous wastes in boilers, such as Cytec's Boiler #3, into the RCRA regulatory scheme. The BIF regulations established interim status standards with which newly regulated boilers were required to comply, effective August 21, 1991. (Ex. 25). In February 1992, Cytec submitted its application for a RCRA permit renewal and modification to add its boiler as a regulated unit. (Exs. 20, 21).

9. Pursuant to 40 CFR §266.103(b), Cytec submitted its Certification of Precompliance ("COP") to the EPA on August 21, 1991. Cytec submitted its Certification of Compliance ("COC") on March 4, 1993. These documents certified that, in test burns under specified conditions, the operation of Boiler #3 discharged air emissions that complied with the emission limits for particulates, chlorine, metals, and other parameters set forth in the BIF rules. The COC also established the boiler's maximum operating limits for

such parameters as total hazardous waste feed rate; feed rates for ash, chlorides, total chlorine, and metals; carbon monoxide concentration; steam production rate; combustion chamber temperature; and flue gas temperature. The COC established the boiler's operating limits using the adjusted Tier I model for calculating emission rates. (Ex. 2, 3, 39).

10. Jae B. Lee, a boiler inspector for the Region, conducted a routine annual inspection of Cytec's facility on April 29-30, 1993. Mr. Lee visually inspected the boiler and associated equipment, and reviewed the COC and other documents supplied by Cytec. He was accompanied during the inspection by Robert L. Greene, Ph.D., Cytec's manager for environmental compliance. In his inspection report Mr. Lee noted several "inspection findings and observed problems." He discussed the inspection results in an exit interview with Dr. Greene. (Exs. 4, 5).

11. At the exit interview, Mr. Lee definitively informed Mr. Greene of one putative violation -- the lack of an automatic hazardous waste feed cutoff ("AWFCO") keyed to the maximum feed rate of total hazardous waste as established in the COC. (Ex. 5, p. 4). At the time of the inspection, Cytec's boiler had a system that automatically cut off the waste feed upon detecting deviations from the COC's limits for carbon monoxide concentration, combustion chamber temperature, spent alcohol feed pressure, and general system failure. The flow of spent alcohol into the boiler was restricted by the size of the orifice, which limited the flow to 180 gallons per hour, but there was no AWFCO for total hazardous waste flow. (Ex. 42, p. 12; Tr. 576-580).

12. From the date of Cytec's submittal of its COC on March 5, 1993, until Mr. Lee's inspection on April 29-30, 1993, Cytec burned hazardous wastes on a total of 23 days. (Tr. 362). On May 4, 1993, several days after Mr. Lee's inspection, Cytec installed a hazardous waste feed interlock that automatically cuts off the flow of hazardous waste when it exceeds a rate of 125 gallons per hour. Cytec informed the Region of the installation of the AWFCO in a letter dated June 11, 1993, that responded to the Region's information request following the inspection. (Ex. 8, p. 14).

13. One of the problems noted by Mr. Lee concerned Cytec's procedures for monitoring its boiler equipment for leaks. (Ex. 5, p. 4). Cytec visually inspected its spent alcohol tank system for leaks on a daily basis, following the procedures in Subpart J of 40 CFR Parts 264 and 265, applicable to "Tank Systems." This daily visual Subpart J monitoring encompassed the tank itself, and all ancillary equipment, including piping, pumps, valves, and flanges between the process line that generated the waste and the boiler. (Tr. 579). Cytec did not conduct monitoring under Subpart BB of 40 CFR Part 266, entitled "Air Emission Standards for Equipment Leaks." That subpart requires equipment to be monitored for leaks by using a portable instrument that is calibrated to detect leaks of volatile organic compounds.

14. In July 1996, Cytec conducted a leak detection procedure on its equipment including the tank system and boiler feed lines, using a Vapor Analyzer as specified in then-proposed Subpart CC of 40 CFR Part 265. Subpart CC, applicable to tanks, was finally adopted, after repeated delays, on December 6, 1996. 40 CFR §255.1080 et seq. That monitoring detecting two small leaks, at rates far below the 10,000 ppm standard in Subpart BB, which were quickly repaired. (Tr. 592-594).

15. Another possible problem noted in Mr. Lee's inspection report concerned Cytec's waste analysis plan. Mr. Lee noted that the specified frequency for repeating a chemical analysis of Cytec's hazardous waste may be inadequate. (Ex. 5, p. 4). Cytec's waste analysis plan provides for recharacterization of the waste alcohol "if process or operational changes occur." (Ex. 36, p. C-53). This has not occurred at least since 1989. (Ex. 35, p. 3).

16. The Region has charged Cytec with failing to specify a test method for ash as part of its waste analysis plan. The test method for ash was omitted in Cytec's table of test methods submitted with its Class 3 permit modification application to the EPA on February 17, 1992. (Ex. 6, Table C.4, p. C-57). A test method for ash, ASTM D482, was, however, cited in Cytec's March 1993 COC. (Ex. 39, Appendix 3).

17. Another possible compliance problem noted by the Region concerned Cytec's method of monitoring and recording the feed rates of ash, chlorine, and chlorides during operation of the boiler, to ensure conformance with the limits in the COC. At the time of Mr. Lee's inspection, Cytec monitored the feed rate of spent alcohol and the main fuel (natural gas or fuel oil #6) continuously on a circular chart recorder. (Ex. 8, Waste Alcohol Recording Chart). This method yielded separate circular graphs showing these flow rates throughout each day (24-hour period) that hazardous waste was burned. This method did not simultaneously provide values for the feed rate of constituents such as ash, chlorine, and chlorides. Those values could be readily calculated, however, by multiplying the flow rate of the spent alcohol by the known constant concentrations of those constituents. (Tr. 344-345).

18. Cytec performed calculations of these feed rates on a daily basis after Mr. Lee's inspection, in response to the Region's RCRA §3007 information request sent to Cytec on May 12, 1993. (Exs. 7, 12). Since the concentrations of ash, chlorine and chlorides in the waste alcohol were very low or non-detectable, at no time did the feed rates for those constituents approach the COC limits. (Ex. 9, p. 6-9; Ex. 12, monthly reports). In April 1993, Cytec installed a computer monitoring system that instantaneously monitors and records the feed rates of those constituents. (Ex. 35, p.4).

19. Mr. Lee conducted his regular annual inspections of Cytec's Kalamazoo facility in 1994. He was replaced by John Gaitskill, who conducted the 1995 inspection of Cytec. Mr. Gaitskill conducted his next inspection of Cytec on October 10, 1996, less than two weeks before the start of the hearing in this matter. He had originally been scheduled to conduct the Cytec inspection on October 25, 1996, just after the scheduled conclusion of the hearing. Mr. Gaitskill moved up the date of the inspection on the request of the Region's counsel in the Cytec proceeding. The Region then proffered Mr. Gaitskill as a witness in the hearing, and offered photographs he took into evidence. The inspection was conducted with the consent of Cytec's manager, Mr. Greene. However, neither Respondent nor the ALJ was aware that Mr. Gaitskill would be offered to testify in the hearing until the Region provided a motion for a supplemental prehearing exchange to that effect just before the start of the hearing. The ALJ allowed the evidence to be presented, subject to any showing of prejudice to Cytec.

Discussion

The following sections will discuss Cytec's liability and appropriate civil penalties, if any, for each remaining count in the Complaint.

- Count II - Frequency of Waste Reanalysis

Count II of the Complaint charges Cytec with failing to develop an adequate waste analysis plan with respect to specifying a test method for ash and a frequency for repeating the initial waste analysis, as required by 40 CFR §265.13. Although no penalty can be assessed for any violation under this count, due to the EPA's failure to comply with the Paperwork Reduction Act, liability remains an issue in the context of the proposed compliance order.

The interim status standards, at 40 CFR §265.13(b)(2), require the owner or operator of a facility to specify the test methods which will be used to test for each parameter that will provide the necessary information to manage the hazardous waste. One of those parameters for Cytec's waste alcohol is its ash content. Cytec's original table listing its test methods for metals and chlorides, submitted with its application to EPA for a Class 3 permit modification on February 17, 1992 (Ex. 6, Table C.4, p. C-57), omitted a citation to its test method for ash. However, Cytec did specify its test method for ash, ASTM D482, in its COC of March 1993. (Ex. 39, Appendix 3, Finding of Fact or "FF" #16). The Region's witness, Mr. Cunningham, testified that Cytec has specified a test method for ash. (Tr. 390). The Region has not argued in its post-hearing briefs that Cytec remains in violation of this requirement. Therefore, Cytec is found in compliance with 40 CFR §265.13(b)(2) with respect to adequately specifying a test method for ash. There is no need for a compliance order to that effect.

Count II also alleges that Cytec failed to adequately specify a frequency for repeating its waste analysis. The standards, at 40 CFR §265.13(a)(3), provide as follows:

"The analysis must be repeated as necessary to ensure that it is accurate and up to date. At a minimum, the analysis must be repeated:

(i) When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous wastes . . . has changed; . . ."

The regulation further requires the waste analysis plan to specify "[t]he frequency with which the initial waste analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date." 40 CFR §265.13(b)(4).

Respondent's plan states only that the waste analysis will be repeated "if process or operational changes occur." (FF #15). Cytec does not specify a calendar-based frequency or regular interval for repeating or reviewing its initial analysis of the spent alcohol waste. Cytec's methylated resins process that generates the spent alcohol has not changed since 1989.

The Region contends that §265.13 requires that the waste analysis plan specify a calendar-based frequency for reviewing or repeating the waste analysis. However, the plain language of the regulation only requires that, at a minimum, the waste be reanalyzed when the owner or operator has reason to believe that the process generating the waste has changed. Cytec's waste analysis plan tracks the regulation precisely in this respect.

The Region apparently believes that it would be preferable to reanalyze the waste on a regular annual basis. The EPA recommended that course in a workshop held on the BIF rules in January 1995. In response to a question concerning a waste stream that does not change, the EPA representative responded that annual reanalysis was recommended, but that less frequent reviews could be worked out with the region or state. (Ex. 17, p. B-3). This recommendation cannot however substitute for the language of the rule itself for the purposes of enforcement. The EPA could easily have required reanalysis of the waste annually or at some other regular interval by simply saying so in the rule.

This is not a situation where the language of the regulation is susceptible to different reasonable interpretations in which some deference could then be given to the interpretation of the Agency. Here the regulation in effect defines "frequency" as, at a minimum, whenever the owner or operator has reason to believe the waste generating process has changed. This regulatory directive supersedes the dictionary definition cited by the Region. Cytec's waste analysis plan complies with the minimum requirement set forth in §256.13 with respect to specifying a frequency for repeating its waste analysis. Therefore there is no need for a compliance order on this issue.

- Count VI - Monitoring and Recording Feed Rates of Ash and Chlorine/Chlorides

Count VI of the Complaint charges Cytec with failing to adequately monitor and record the feed rates of ash, total chlorides, and chlorine to its boiler. The primary regulation at issue here is 40 CFR §266.103(j)(1), which states:

"The owner or operator must monitor and record the following, at a minimum, while burning hazardous waste: (i) Feed rates and composition of hazardous wastes, other fuels, . . . , and feed rates of ash, metals, and total chloride and chlorine as necessary to ensure conformance with the certification of precompliance or certification of compliance."

Under this count, the Region also cites Respondent in violation of 40 CFR §§266.103(b)(5), 266.103(c)(4), and 266.103(k). Sections 266.103(b)(5) and 266.103(c)(4) address the methods for monitoring and recording these and other parameters during compliance testing for the purposes of establishing operating limits in completing the facility's certifications of precompliance and compliance ("COP" and "COC"), respectively. Section 266.103(k), entitled Recordkeeping, states "[t]he owner or operator must keep in the operating record of the facility all information and data required by this section until closure of the boiler or industrial furnace unit."

Cytec filed its COC in March 1993, which superseded the COP, which had been filed in August 1991. The methods described in the regulations for monitoring the parameters listed in §266.103(b)(3), including ash, and chlorine/chlorides, for the purposes of the COP and COC, are, however, virtually identical. (Compare 40 CFR §266.103(b)[5][i-iii] with §266.103(c)[iv][A-D]). These regulations require the owner or operator to determine the facility's operating limits generally by either using a method that monitors and records instantaneous limits or hourly rolling average limits. With respect to establishing the feed rate limits for metals, total chloride and chlorine, and ash for the COP and COC, however, 40 CFR §266.103(b)(5)(iii) and §266.103(c)(iv)(D) both provide as follows:

"Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance (i.e., metals, chloride/chlorine, and ash) in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream must be monitored under the continuous monitoring requirements of paragraphs (b)(5)(i) and (ii) [(c)(4)(iv) (A) through (C)] of this section."

This is the method that Cytec does in fact follow to monitor its feed rates of ash and chlorine/chlorides. Cytec's circular chart recorder in use at the time of Mr. Lee's inspection continuously monitors the flow rate of the spent alcohol feedstream. The feed rates of ash and chlorine/chlorides can then be calculated by multiplying their concentrations by the waste feed rate. (FF #17).

The Region contends that Cytec is nevertheless in violation because it did not separately record the feed rates of ash and chlorine/chlorides, until after Mr. Lee's inspection in April 1993. After the inspection Cytec performed the calculations of the feed rates for each day that hazardous waste was burned, and sent them to the Region in monthly reports. (Ex. 12). Those reports confirmed that feed rates conformed with the operating limits set in the COC, and resulted in air emissions far below the applicable limits for these parameters. (FF #18).

Cytec did initially establish the feed rates for ash and chlorine/chlorides for its COP and COC, however, in accord with the methods specified in the regulations, 40 CFR §§260.103(b)(5)(iii) and 260.103(c)(iv)(D), as described above. (Exs. 1, 3, and 39). These documents indicated that the content of those parameters in the waste was either non-detectable or so low that there was no chance of exceeding the emission limits for any parameter so long as the spent alcohol waste composition did not change. Since all constants were known, a glance at the spent alcohol recording chart sufficiently showed that the feed rates of ash and chlorine/chloride continued in conformance with the COP and COC. Cytec could easily have graphed those feed rates on the same recording charts, but doing so would have been superfluous. The record shows that Cytec's continuous monitoring and recording of the waste alcohol flow rate in these circumstances was sufficient to "to ensure conformance with the certification of compliance," as required by the regulation. Therefore, Count VI will be dismissed, and no penalty will be assessed for failure to adequately monitor and record these feed rates.

- Count VI - Penalty for Lack of Automatic Waste Feed Cutoff

Cytec has already been found liable for the violation alleged in Count VI of the Complaint. At the time of the inspection, Cytec did not have an operating system to automatically cut off the feed of hazardous waste to the boiler if the total flow exceeded the limit established in the COC. Such an AWFCO is required by 40 CFR §266.103(g) and §266.103(c)(1)(i). Cytec's system did cut off the flow of hazardous waste to the boiler when other operating conditions listed in §266.103(c)(1) deviated from those established in the COC. (FF #11). Cytec installed an AWFCO interlocked to the COC's total hazardous waste flow limit of 125 gallons per hour several days after the inspection. (FF #12). The only issue remaining with respect to Count VI is the appropriate amount of the civil penalty to be assessed.

RCRA §3008(a)(3) provides for the assessment of civil penalties of up to \$25,000 per day of noncompliance with any requirement of RCRA. This section also states that, "[i]n assessing such a penalty, the Administrator shall take into account the seriousness of the violation and any good faith efforts to comply with applicable requirements."

The Region calculated its proposed civil penalty for Count V by following the guidelines in the RCRA Civil Penalty Policy dated October 1990 (Ex. 22, the "Penalty Policy"). The Penalty Policy is designed to be consistent with §3008(a). Its purposes are "to ensure that RCRA civil penalties are assessed in a fair and consistent manner; that penalties are appropriate for the gravity of the violation committed; that economic incentives for noncompliance with RCRA requirements are eliminated; that penalties are sufficient to deter persons from committing RCRA violations; and that compliance is expeditiously achieved and maintained." (Ex. 22, p. 5). The EPA Rules of Practice require the Administrative Law Judge to consider such civil penalty guidelines in determining the appropriate amount of the penalty, and to state the reasons for the any decision that varies the amount from that proposed in the complaint. 40 CFR §22.27(b).

The Penalty Policy establishes a method in which the proposed penalty is derived through a sequential process. First, a gravity-based component is determined. For certain violations, a multi-day component is then added. Adjustments may then be made to that amount for various additional factors such as the violator's degree of culpability, history of noncompliance, and economic benefit.

The gravity-based component is intended to measure the seriousness of the violation. It is determined by examining two factors: the potential for harm, and the extent of deviation from the requirement. The first of those factors, the potential for harm, is in turn based on two components: the risk of human or environmental exposure to hazardous waste or hazardous constituents, and the adverse effect on the RCRA regulatory program. Both the potential for harm and extent of deviation are rated either major, moderate or minor. The Penalty Policy then constructs a matrix with a range of civil penalties for the gravity component of the violation depending on the assessment of these two factors. (Ex. 22, p. 19). A similar matrix is developed for multi-day penalties. The addition of multi-day penalties is either mandatory, presumed, or discretionary, depending on the extent of the combined gravity component. (Ex. 22, p. 23-24).

In this case, the Region determined that the AWFCO violation had a moderate potential for harm and a moderate extent of deviation from the regulatory requirement. The Region then assigned a penalty value in the middle of the range in the matrix for a "moderate-moderate" determination: \$6500. Since a moderate-moderate violation carries presumed multi-day penalties, the Region then added the midrange multi-day value of \$925 multiplied by the number of days of violation after the first day (59), yielding a total penalty of \$61,075. (Ex. 23, Count 5).

Cytec challenges this penalty assessment on a number of bases. Cytec stresses the clean nature of its spent alcohol hazardous waste fuel and the other controls and cutoffs in place on its feed into the boiler at the time of the inspection. Even if the feed rate were to exceed the operating limit of 125 gallons per hour, as it did on April 26, 1993, there would still be no risk that the emission limit could be exceeded for any parameter. (Ex. 8, p. 14-15). The size of the hazardous waste feed line orifice physically restricted the maximum flow of spent alcohol into the boiler to 180 gallons per hour. Cytec could have burned this waste at a rate of 1230 gph, almost ten times the operating limit, without exceeding air emission limits. (Tr. 211-212). The Region did not present any substantial evidence to contradict these facts concerning the virtually non-existent risk to human health or the environment due to Cytec's lack of an AWFCO. Cytec argues that the potential for harm from this violation was so low that no penalty should be assessed. If this were the only factor to be considered in the gravity component, it would be determined to be minor.

However, the primary risk of harm from this violation is not to human health or the environment, but to the integrity of the RCRA regulatory program. The requirement for an operating limit on feed rate of total hazardous waste in the COC is the first one listed in 40 CFR §266.103(c)(i). The ability to automatically cut off the flow of the hazardous waste when the waste feed rate limit is exceeded is the most direct means to ensure compliance with the established operating limits for all parameters. Even if there is little risk of actual exposure to hazardous constituents due to an exceedence, the limit on total hazardous waste flow represents the cornerstone of the entire COC upon which all other operating limits are based. As discussed above, it provides, for example, the basis for calculating feed rates of ash and chlorides. Although the hazardous waste Cytec burns happens to be relatively clean, the failure to install the most basic cutoff device, on excess hazardous waste flow, has a significant adverse effect on the regulatory purpose for these RCRA requirements. (See Ex. 22, p. 15).

The Penalty Policy states that the overall "potential for harm" factor in the gravity component is considered moderate if there is a moderate risk of environmental exposure and/or there is a significant adverse effect on the RCRA program. (Ex. 22, p. 15). Here there was a minor risk of exposure to hazardous waste, but moderate harm to the regulatory program. Although this is somewhat of a borderline situation, the Region's determination will be upheld. Under the Penalty Policy, the violation of failure to install an AWFCO on total hazardous waste feed rate has an overall moderate potential for harm.

Cytec did have automatic cutoff controls in place for exceedences of the other applicable limits required by the regulations: carbon monoxide concentration, temperature, production rate, and waste feed pressure. (FF #11). The AWFCO for the operating limit for feed rate of total hazardous waste, as discussed above, is the most basic and direct means to ensure compliance with all COC parameters. Therefore, the extent of deviation from the regulatory requirement is also determined to be moderate. Since all other required cut-offs were in place, however, this is again a relatively less serious moderate deviation.

This analysis confirms the Region's determination that this violation merits a gravity component based on a moderate potential for harm and a moderate extent of deviation. The Penalty Policy matrix provides a range of penalties for such violations from \$5000 to \$7999. The Region chose the midpoint of \$6500. However, the lower end of this range represents a more appropriate value due to the virtually nonexistent risk of human or environmental exposure to hazardous wastes or constituents from this violation, and the presence of the other required AWFCO triggers. Although the harm to the regulatory program is considered moderate, the risk of environmental harm is minor. The extent of deviation is also in the low range of moderate since Cytec did have AWFCO triggers for all other required parameters. These factors combined indicate that the low figure in the range for moderate-moderate violations, \$5000, should be selected. (See Penalty Policy matrix, Ex. 22, p. 19).

The Penalty Policy states that there is a presumption in favor of imposing multi-day penalties for violations with the gravity designation of "moderate-moderate." (Ex. 22, p. 23). The multi-day penalty matrix provides a range of \$250 to \$1600 per day of continuing moderate-moderate violations. (Ex. 22, p. 24). Again, however, the amount selected should be at the low end of the range, for the reasons discussed above. Although Cytec is apparently a relatively large and sophisticated company, the lack of an AWFCO for total hazardous waste feed rate did not present any real environmental or human health risk. Cytec demonstrated cooperation by its prompt remediation of this deficiency immediately after the inspection. The Penalty Policy provides for recognition of degree of cooperation and promptness of remediation in consideration of multi-day penalties. (Ex. 22, p. 25). Therefore, the lowest value, \$250, will be selected as the appropriate amount for Cytec's multi-day penalty for this violation, rather than the middle amount of \$925 chosen by the Region.

The parties also differ over the appropriate number of days that should be counted under this violation. The BIF rule, 40 CFR §266.103(g), requires the AWFCO to be functioning "[d]uring the compliance test . . . and upon certification of compliance." The Region applied the multi-day penalty to the total of 59 days, encompassing three days of compliance testing in September 1992, and the additional 56 days following the submittal of Cytec's COC on March 5, 1993, until the inspection of April 29-30, 1993. Cytec contends, however, that only those days in which hazardous waste was actually burned in the boiler should be counted. It is not disputed that there were only 23 such days during these periods. (FF #12).

The plain language of the regulation supports Cytec's position. Section 266.103(g) requires an AWFCO for deviations from all operating conditions specified in §266.103(c)(1). That subsection states that the boiler "must be operated in accordance with these operating limits . . . at all times when there is hazardous waste in the unit." (emphasis added). Where the time unit under consideration for penalty

purposes is days, it follows that Cytec can only be penalized on days when hazardous waste was burned in the boiler. The penalty for this violation will therefore be \$5000 plus \$250 for 22 additional days, for a total of \$11,500.

There is no basis in the record to adjust this penalty for any of the adjustment factors listed in the Penalty Policy. The only one that the parties addressed in their briefs was the issue of Cytec's good faith efforts to comply. It is commendable that Cytec came into compliance immediately after the inspection, by installing an AWFCO for total hazardous waste feed rate. However, this compliance after discovery of the violation is not sufficient reason to adjust the penalty downward. The matrix values in the Penalty Policy already assume good faith efforts to comply after the EPA's discovery of a violation. (Ex. 22, p. 33). Cytec has already been afforded the benefit of its prompt remediation of this violation by designating the smallest amounts for penalties in the matrices for this moderate gravity violation. Therefore, the penalty for the AWFCO violation alleged in Count V of the Complaint will remain at \$11,500.

Cytec also argued that the penalty proposed for this violation was unfairly out of proportion to others imposed for similar AWFCO violations in Region 5, in the same enforcement initiative that resulted in the Cytec complaint. Limited evidence of complaints and penalty calculations were received into evidence for four other proceedings ("comparables") that included a charge of deficient AWFCOs. (Exs. 27-31). The proposed penalties in those cases ranged from \$1000 to \$4000.

The evidence of the comparables did in fact provide a useful cross-check, showing that the amount derived above is appropriate for Cytec's violations. Without going into details, it is sufficient to note that the other four had a relatively "minor" gravity component, and none involved precisely the same violation found here -- lack of a cutoff on total hazardous waste flow. Cytec's violation was indeed more serious than those in the comparable proceedings, but, for the reasons given above, not to the magnitude proposed by the Region. The penalty assessed by this decision, \$11,500, is commensurately greater than those sought in the comparable proceedings.

The penalty of \$11,500 for this violation was derived wholly based on the facts relating to Cytec's AWFCO system, consistent with RCRA §3008(a) and the Penalty Policy. Cytec showed that its violation of 40 CFR §266.103(g) should be assessed at the low end of the range for "moderate-moderate" gravity violations, for days when it burned hazardous waste.

- Count III - Subpart BB Monitoring

Count III of the Complaint alleges that Cytec failed to monitor the pumps and valves connected to its boiler for vapor leaks, as required by Subpart BB of 40 CFR Part 265. The BIF rule provides that facilities operating under interim status(3) are subject to specified provisions of Part 265, the interim status standards for hazardous waste treatment, storage, and disposal facilities. One of those provisions rendered applicable to newly regulated boilers that burn hazardous waste is Subpart BB. The regulation, 40 CFR §266.103(a)(4)(viii), states that:

"Owners and operators of boilers and industrial furnaces that burn hazardous waste and are operating under interim status are subject to the following provisions of part 265 of this chapter, except as provided otherwise in this section: . . .

(viii) Subpart BB (Air emission standards for equipment leaks), except §265.1050(a)."

Subpart BB applies to equipment, including pumps and valves, that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight. 40 CFR §§265.1050, 265.1052, and 265.1057. It is not disputed that Cytec's spent alcohol hazardous waste has organic concentrations of at least 10 percent by weight. The Subpart BB regulations require the owner or operator of a regulated facility to monitor such equipment monthly for leaks, using a portable leak detection instrument. 40 CFR §265.1063, referring to 40 CFR Part 60, Method 21.

Cytec argues that it is not required to conduct such Subpart BB monitoring since it stores its waste alcohol in a tank for less than 90 days, before it is burned in the boiler. At the time of the Region's inspection of Cytec in April 1993, such 90-day accumulation tanks were exempt from all RCRA permit and interim status standards, pursuant to 40 CFR §262.34, provided certain conditions were satisfied. One of those conditions required monitoring of the tank systems under Subpart J of Part 265.(4) Cytec conducted such Subpart J, or daily visual monitoring of the tank and waste feed lines, valves, and pumps, leading to the tank from the process line, and from the tank to the boiler. (FF #13). The exemption from Subpart BB for generators who store wastes in 90-day tanks was explicitly preserved in a note that appears at the end of 40 CFR §265.1050.(5)

Cytec also argues that it is not required to conduct Subpart BB monitoring because it is protected by the "permit-as-shield" policy pursuant to 40 CFR §270.4, due to Cytec's RCRA permit for its drum storage unit. That permit was in effect at the time of the 1993 EPA inspection. (FF #7). Cytec further argues that the EPA failed to provide adequate notice of its interpretation of Subpart BB's application to BIF units, and should be precluded from imposing a penalty for any such violation. These issues will be addressed below.

-- Exemption for 90-day Tank Systems

Cytec contends that the exemption for generators who store wastes in a tank for 90 days or less extends to its entire "tank system," which includes the waste feed lines, pumps, and valves between the tank and the boiler. The Region argues that the exemption covers only the 90-day tank itself and the "upstream" equipment leading into the tank, but not the "downstream" equipment that conducts the hazardous waste from the tank into the boiler. This decision finds that the Region's interpretation is more consistent with the regulatory definitions and scheme of the BIF rule. Therefore, Cytec is found liable for failure to comply with Subpart BB monitoring of this equipment, as alleged in Count III of the Complaint.

There is no significant dispute concerning the physical nature of Cytec's spent alcohol management system. The entire system was essentially depicted in a simple hand-drawn schematic diagram (Ex. 18). The waste is generated in the plant process line, then piped to the 90-day tank, where it is stored until it is piped to Boiler #3. It is then burned in the boiler, resulting in the generation of steam energy and air emissions. There are pumps and valves on the waste feed lines, both upstream and downstream of the tank. The spent alcohol hazardous waste is in contact with all of this equipment. (FF #5).

In order to determine the extent of the exemption from Subpart BB monitoring for this equipment at Cytec's facility, it is first necessary to examine the definitions at the beginning of the RCRA regulations, found at 40 CFR §260.10. Cytec maintains that the exemption for 90-day accumulation facilities encompasses its "tank" and entire "tank system." Section 260.10 defines tank system as "a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system." The key definition is that of "ancillary equipment."

"Ancillary equipment means any device including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of hazardous waste from its point of generation to a storage or treatment tank(s), between hazardous waste storage and treatment tanks to a point of disposal onsite, or to a point of shipment for disposal off-site." 40 CFR §260.10.

Under this definition, it is clear that the pipes, pumps, and valves between the Cytec facility's process line and the 90-day storage tank are ancillary equipment and part of the tank system. Downstream of the tank, however, the equipment must lead to a treatment tank, to an onsite disposal unit, or to a point of shipment for off-site disposal. Boiler #3 does not qualify as any of those destinations for the hazardous waste. Therefore, the exemption for 90-day accumulation tank systems does not extend to the equipment between Cytec's storage tank and the boiler.

The definitions confirm that Cytec's Boiler #3 is a "boiler" that conducts "treatment" but not "disposal" of the hazardous waste.

"Disposal means discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters." 40 CFR §260.10.

Although the burning of the spent alcohol in Cytec's boiler results in air emissions, the passage of the waste into the boiler is not its "placing . . . into or on any land or water." Rather, paraphrasing the definition of "treatment," it there undergoes a "process designed to change its physical and chemical character so as to recover energy from the waste." 40 CFR §260.10. Of course, the unit where this takes place also conforms to that section's definition of "boiler." The regulatory definitions thus verify that Cytec's 90-day accumulation tank system does not include the pipelines, pumps, and valves between the tank and the boiler.

This conclusion is also consistent with the basic purpose and logic behind the BIF rule. The EPA intended, on the effective date of the rule (August 21, 1991) to "expand controls on hazardous waste combustion to regulate air emissions from the burning of hazardous wastes in boilers and industrial furnaces." As an adjunct to this basic purpose, "the rules subject owners and operators of these devices to the general facility standards applicable to hazardous waste treatment, storage, and disposal facilities." (Ex. 25, 56 FR 7134). Once the hazardous waste leaves Cytec's 90-day storage tank, it is dedicated to treatment in the boiler that is brought under regulation by the BIF rule. The waste at that point is no longer merely stored on a short-term basis for disposal or further treatment in a tank. The requirement for Subpart BB monitoring for equipment leaks in §266.103(a)(4)(viii) would have little import if it did not apply to the equipment feeding hazardous waste directly into newly regulated boilers.

-- Permit-as-Shield

Cytec also contends that it was not required to comply with Subpart BB monitoring at the time of the inspection, because it was shielded from enforcement by its RCRA permit. Respondent cites 40 CFR §270.4(a), known as the "permit-as-shield" provision. That section states that "[c]ompliance with a RCRA permit during its term constitutes compliance, with for purposes of enforcement, with subtitle C of RCRA . . .," with certain exceptions. On December 6, 1994, this section was amended to add a specific exemption, §270.4(a)(4), for requirements promulgated under Subparts AA, BB, and CC of Part 265. This exemption was not of course in effect at the time of the Region's inspection of Cytec in April 1993. The effect of the permit-as-shield provision is to preclude EPA from enforcing RCRA provisions that do not appear in a facility's RCRA permit. When a permit is modified or renewed, any omitted or newly applicable additional requirements can then be incorporated. *Shell Oil Company v. EPA*, 950 F.2d 741, 765 (D.C. Cir. 1991).

The requirement to conduct Subpart BB monitoring is found in the interim status standards for boilers, 40 CFR §266.103. As stated in the preceding section, §266.103(a)(4)(viii) requires such boilers to comply with Subpart BB of Part 265. Cytec does not dispute that its Boiler #3 was an "existing" boiler, in operation on August 21, 1991, subject to the interim status standards until a permit is issued, pursuant to §266.103(a)(1)(i) and (ii).

Cytec's claim would extend the scope of the permit-as-shield rule far beyond its intent. The shield can only protect an area as broad as the permit on which it is based. This basic permitting principle is expressed in 40 CFR §270.1(c)(4), as follows:

"Permits for less than an entire facility. EPA may issue or deny a permit for one or more units at a facility without simultaneously issuing or denying a permit to all of the units at the facility. The interim status of any unit for which a permit has not been issued or denied is not affected by the issuance or denial of a permit to any other unit at the facility."

Cytec's RCRA permit was issued only for its drum storage unit in 1989. (FF #7). The definition of "facility" in 40 CFR §260.10 similarly states that "[a] facility may consist of several treatment, storage, or disposal operational units." Cytec's Boiler #3 came under interim status on the effective date of the BIF regulation, August 21, 1991. Its permitting, and any enforcement, may be pursued completely separately from the permitting and any enforcement concerning the drum storage unit.(6)

Cytec cites the preamble to the notice of the Subpart BB regulation, published on June 21, 1990, at 55 FR 25490. (Ex. 15). The permit-as-shield policy as applied to the new organic air emission standards for hazardous waste units was also addressed in an EPA Seminar Publication on the topic, dated August 1992. (Ex. 33, p. 60). In these documents, the EPA expressly recognized that the permit-as-shield policy would apply to permitted facilities, with respect to the new Subpart BB rules, until the anticipated Phase II revision to the hazardous waste air emission standards. (Ex. 33, p. 63; also see note 4 above). However, this policy must be read in light of the principle of separate hazardous waste management unit permitting. The permit-as-shield certainly would have applied to Cytec's drum storage unit in 1993 if it had any equipment subject to Subpart BB monitoring. It has no application, however, to Cytec's boiler which, in June 1990, had no permit or interim status, before promulgation of the BIF rule. Once the boiler acquired interim status it was subject to the interim status standards set forth in 40 CFR §266.103.

This precise question was in fact answered by the EPA in the 1992 Seminar Publication, as follows:

"Question -- If a manufacturing facility has both final and interim status units, does the rule apply?"

Answer -- The rule applies to interim status units; final permit units are shielded." (Ex. 33, p. 63).

Subpart BB thus applied to Cytec's interim status Boiler #3, despite the fact that Cytec had a final permit for its drum storage unit.

Cytec's argument, taken to its full logical extent, would actually preclude any enforcement action concerning the boiler, including all counts in the Complaint, simply because Cytec had a pre-existing permit for its drum storage unit. Cytec has never challenged the fact that the boiler acquired interim status on the effective date of the BIF rule. That fact is stated in Cytec's own permit renewal application, by its witnesses, and is evident in its entire course of conduct in completing the necessary certifications of precompliance and compliance required by §266.103. (See e.g., Ex. 20, p. D-8; Tr. 595). Cytec was acting in compliance with the timetable for obtaining the certifications of compliance and submitting permit applications as required by 40 CFR §270.42(g) for an existing newly regulated interim status BIF unit. This schedule is set forth in EPA's Technical Implementation Document for the BIF rule. (Ex. 19, p. 10-5). Cytec falls within the category of a facility with a permitted non-BIF unit, and a newly regulated BIF. The boiler unit acquired interim status on the effective date of the BIF rule, August 21, 1991.

Cytec's Boiler #3, as a newly regulated BIF interim status unit, was subject to the interim status standards, including the requirement to conduct Subpart BB monitoring pursuant to 40 CFR §266.103(a)(4)(viii). The permit-as-shield rule does not apply to enforcement concerning Cytec's BIF unit, Boiler #3.

-- Adequate Notice of Applicability of Subpart BB

Cytec argues that, if the Region's interpretation of Subpart BB applicability is upheld, it should not be penalized because the EPA did not provide adequate notice of its interpretation to Cytec and the regulated community. Cytec cites the case of *General Electric Company v. U.S. EPA*, 53 F.3d 1324 (D.C. Cir. 1995). That decision held that fundamental principles of due process require that a regulated party receive "fair notice" of a regulatory interpretation in order for the agency to assess a civil penalty for a violation of the regulation. "Fair notice" requires that "a regulated party, acting in good faith, would be able to identify, with 'ascertainable certainty,' the standards with which the agency expects parties to conform." *Id.* at 1328, citing *Diamond Roofing Co. v. OSHRC*, 528 F.2d 645, 649 (5th Cir. 1976).

The standard here -- the applicability of Subpart BB monitoring to BIF units that are fed by exempt 90-day waste accumulation tanks -- is hardly a paragon of clarity. Nevertheless, the EPA's interpretation is reasonably ascertainable from a reading of the regulations. There was some disagreement and confusion evident among the EPA witnesses and technical documents. For example, Mr. Lee and Mr. Cunningham disagreed on whether the exemption encompassed just the "tank" or the entire "tank system." This issue was complicated by a "decision tree" in an EPA technical document that referred to an exemption for "tank systems." (See Tr. 144, 381; Ex. 14, p. 3-12). These witnesses' opinions are not accorded any weight to the extent they encompass purely legal issues. Nevertheless, no EPA witness advanced the position asserted by Cytec -- that Subpart BB was not applicable to any of its equipment leading to the regulated boiler.

The regulatory definitions provided sufficient fair notice that the 90-day tank system did not extend to the feed lines leading from the tank to the boiler. Thus, assuming the exemption covered the entire tank system, it did not cover the equipment feeding hazardous waste from the tank to the boiler. Therefore, Cytec is subject to a civil penalty for its failure to monitor that equipment pursuant to Subpart BB.

It would have been preferable for EPA to have included in the BIF rule, or in an accompanying revision of the definitions, an explicit statement of the limits of the exempt 90-day tank system when used in a facility in conjunction with a newly regulated BIF unit. Instead, the BIF rule was superimposed on pre-existing definitions that did not expressly contemplate these precise circumstances. Indeed, the principle behind the definition of "tank system" is to encompass pipelines, pumps, and valves both upstream and downstream of the tank itself. It is not a completely unreasonable reach to consider the burning of the hazardous waste in the boiler as disposal rather than treatment. There is no apparent or expressed reason why Subpart BB monitoring of the equipment leading from the tank to the boiler should be required, while such monitoring the upstream equipment, transporting the same hazardous waste, is not. The environmental or human health risks of vapor leaks would be the same whether the leak occurred upstream or downstream of the tank. At the EPA seminar on the BIF rule held in January

1995, the speaker, Ginger Gotliffe, confirmed that 90-day tanks or tank systems were "outside the universe" of the rule, without further defining the physical extent of the exemption in facilities with both 90-day tanks and BIF units. (Ex. 17, p. 18).

These considerations fall short of the standard to prevent a imposition of a penalty articulated in General Electric: where the "regulations and policy statements are unclear, where the petitioner's interpretation is reasonable, and where the agency itself struggles to provide a definitive reading of the regulatory requirements." The requirement for Subpart BB monitoring appeared in the BIF rule, and all the relevant definitions appeared in the regulations from the rule's inception. Cytec should have been on notice that Subpart BB monitoring of equipment leading directly to the boiler was required, despite its exempt 90-day tank system. The agency never struggled to the extent of considering this equipment exempt. There is no reason however to believe that Cytec acted in other than good faith in believing it was exempt from Subpart BB. These circumstances may be considered in relation to the determining the appropriate amount of the civil penalty for this violation, but will not prevent the assessment of any penalty.

-- Civil Penalty for Subpart BB Violation

The Region proposed a civil penalty of \$199,500 for Cytec's violation of failure to conduct Subpart BB monitoring on the pumps and valves on the feed lines to the boiler. (Ex. 23, Count 3). The Region followed the Penalty Policy described above. (Ex. 22). The Region determined that the violation represented a moderate potential for harm and a major extent of deviation. Under the Penalty Policy matrix, the range for "moderate-major" violations is from \$8000 to \$10,999. The Region then assigned the value at the midpoint of that range, \$9500, and multiplied it by 21 days of violation, representing 21 months of failure to conduct the required Subpart BB monthly inspections. This resulted in the calculated penalty of \$199,500.

The record supports a reduction in the extent of deviation for this violation from major to moderate. The Region calculated this penalty without considering the fact that Cytec conducted Subpart J monitoring of its entire tank system, and all equipment feeding the boiler. (Tr. 319). Although Subpart J visual monitoring might not detect vapor leaks that Subpart BB monitoring could detect, Subpart J monitoring is done on a daily basis. Such monitoring provided a significant benefit since the waste alcohol was in liquid, rather than gaseous form. In addition, the lack of clarity over the extent of the 90-day tank system exemption during the early days of the BIF rule should be considered. Where it was not entirely clear what type of monitoring was required for which components of the facility's equipment, the extent of deviation from the standard may be considered reduced.

The Region's determination of a moderate potential for harm will be upheld for the purposes of this decision. The Region did not show substantial risk to the environment or human health as a specific result of Cytec's failure to conduct Subpart BB monitoring. The only alleged risk is a general one to the atmosphere due to the cumulative effects of excess organic emissions. (Tr. 305). Cytec did show again that its spent alcohol is relatively benign in terms of its potential emissions, and that its lines are relatively leak-tight. Subpart CC monitoring performed in 1996 did reveal two small vapor leaks, at levels

far below those that would have been detected or regulated under Subpart BB. It remains possible however that vapor leaks occurred earlier that were not detected by Cytec due to its lack of Subpart BB monitoring. This constitutes a moderate, if general, risk to the environment or human health.

In addition, there is moderate harm from this violation to the integrity of the BIF regulatory program. The intent of the program was to impose Subpart BB monitoring on regulated boilers and their associated equipment. The Respondent failed to comply with this standard for a 21-month period. The range for "moderate-moderate" violations is \$5000 to \$7999, with a midpoint of \$6500.

The Region derived its proposed penalty by using the main matrix amount of \$9500 as the basis for the multi-day penalty, rather than the multi-day matrix. (Ex. 22, p. 24). This is an apparent departure from the Penalty Policy that was not explained by the Region, and results in a much higher penalty than if the multi-day matrix is used. In the totality of the circumstances here, particularly the lack of any specific substantial risk to human health or the environment, and the lack of clarity of the Subpart BB requirement, the lower multi-day penalty matrix should be used. This would accord with the Penalty Policy itself which contemplates the use of the multi-day grid in most circumstances.

The range for moderate-moderate violations is \$250 to \$1600, with a midpoint of \$925. The total penalty for the Subpart BB violation will thus be \$6500 plus \$925 for the 20 additional days of violation, for a total of \$25,000. This happens to be the same as the maximum amount for a single violation of RCRA, which is appropriate in the totality of the circumstances. No other adjustments are applicable. This is a sufficient amount to constitute adequate deterrence and recognition of the violation, but is not unduly punitive. No compliance order is necessary with reference to this count, since Cytec recognizes that it is now subject to Subpart BB monitoring for its entire tank system as well as the boiler equipment, under the recent amendments.

- Other Considerations Raised by Respondent

Cytec argues that the Region acted improperly in delaying the prosecution of this proceeding beyond the timetable guidelines set forth in the Penalty Policy. Cytec also claims that the October 1996 inspection by Mr. Gaitskill amounted to deceptive and unauthorized discovery. The parties also dispute whether Cytec's Mr. Greene informed the Region's inspector, Mr. Lee, at the conclusion of his 1993 inspection, of Cytec's belief that it was exempt from Subpart BB monitoring. However, in view of the penalty assessed by this decision, which is substantially lower than that proposed by the Complaint, no further adjustments are warranted by any of these factors.

There was unquestionably an element of deception in the Region's moving up the date of Mr. Gaitskill's 1996 inspection, at the request of Regional counsel, from its originally scheduled date after the hearing, to before the hearing. (FF #19). The Region did this without informing Cytec or this court that Mr. Gaitskill might testify and present photographic evidence. In these circumstances it is not credible that this idea occurred to the Region only after Mr. Gaitskill's inspection. Although Mr. Greene consented to the inspection, Cytec's counsel was not informed. However, Mr. Gaitskill's testimony and evidence was not significantly prejudicial to Cytec. For the reasons given above, the total penalty here is already

reduced substantially, and no further adjustment is warranted for any deception or misconduct by the Region.

Cytec also points out that the prosecution of this proceeding was somewhat delayed beyond the timetables set forth in EPA's RCRA Enforcement Response Policy (Ex. 26) and BIF Enforcement Strategy (Ex. 11). Those documents establish enforcement goals. For example, the agency is supposed to initiate action against medium priority violators within 120 days of the discovery of a violation. These are by no means mandatory deadlines, however, but only enforcement goals for the use of EPA enforcement personnel. They are not binding and create no rights on behalf of the regulated community. There is no allegation that the Region here did not proceed with this matter within a reasonable time, as required by the Administrative Procedure Act §555(b). There is thus no basis to reduce the penalty or Cytec's liability for any delay in the prosecution of this proceeding.

Cytec also claims it was not provided any notice by Mr. Lee, at the conclusion of his inspection, of the Subpart BB violation. Mr. Greene testified that he told Mr. Lee that the tank system was exempt because it was a 90-day accumulation tank. (Tr. 577). Mr. Lee's report states that Cytec stated Subpart BB was not applicable, but "could not demonstrate why Subpart BB is not applicable." (Ex. 9, p. 4). This dispute is however of no substantial significance to the decision. The alleged violations took place from August 1991 until the April 1993 day of the inspection. Whether the 90-day exemption was sufficiently explained by Mr. Greene and understood by Mr. Lee has no bearing on Cytec's liability or even on the penalty considerations, which are based on the period before the inspection. The record as a whole does show that Cytec believed it was exempt, regardless of the content of the exit interview between Mr. Greene and Mr. Lee. This decision finds that the exemption did not in any event encompass the equipment between the tank and the boiler. Therefore, no adjustment of the determinations on liability and penalty will be made concerning the notice to Cytec after the inspection.

Conclusions of Law

1. The Respondent, Cytec, had an adequate waste analysis plan with respect to specifying a test method for ash and a frequency for repeating its initial waste analysis, for its Kalamazoo facility. Hence, Cytec did not violate 40 CFR §265.13 as alleged in Count II of the Complaint. That charge is therefore dismissed.
2. Cytec adequately monitored and recorded the feed rates of ash, chlorine, and total chlorides into its boiler, as necessary to ensure conformance with its certification of compliance. Hence, Cytec did not violate 40 CFR §§266.103(j)(1), 266.103(b)(5), 266.103(c)(4), or 266.103(k) as alleged in Count VI of the Complaint. That count is therefore dismissed.
3. Cytec did not monitor its equipment between its 90-day accumulation tank and its Boiler #3, following the procedures set forth in Subpart BB of 40 CFR Part 265, as required by 40 CFR §266.103(a)(4)(viii). Hence, Cytec committed this violation, alleged in Count III of the Complaint. An appropriate civil penalty for this violation is \$25,000.

4. As found in an earlier decision, Cytec failed to have an automatic cutoff for total hazardous waste flow in excess of the limit in its certification of compliance, as required by 40 CFR §§266.103(g) and 266.103(c)(1)(i). Cytec thus committed the violation alleged in Count VI of the Complaint. An appropriate civil penalty for this violation is \$11,500.

Order

1. The Respondent, Cytec Industries, Inc., is assessed a civil penalty in the amount of \$36,500.

2. Payment of the full amount of this civil penalty must be made within 60 days of service of this order by submitting a certified or cashier's check in the amount of \$36,500, payable to the Treasury, United States of America, mailed to:

EPA - Region 5

P.O. Box 70753

Chicago, IL 60673

3. A transmittal letter identifying the subject case and docket number, and Respondent's name and address, must accompany the check. Respondent may be assessed interest on the civil penalty if it is not paid within the prescribed period.

Appeal Rights

Pursuant to 40 CFR §§22.27(c) and 22.30, this Initial Decision shall become the final order of the Agency, unless an appeal is filed with the Environmental Appeals Board within 20 days of service of this order, or the Board elects to review this decision sua sponte.

Andrew S. Pearlstein

Administrative Law Judge

Dated: December 23, 1997

Washington, D.C.

1. The Complaint originally named American Cyanamid Company as the Respondent. In an order of January 26, 1996, the name of the Respondent was changed in the caption to reflect the parties' acknowledgment that Cytec Industries, Inc., which was formerly part of American Cyanamid, is the proper Respondent for the violations alleged in the Complaint.

2. References to the record are for the convenience of the reviewer. They are representative only, and not intended to be exhaustive. "Ex." refers to a numbered hearing exhibit, and "Tr." refers to a numbered page of the stenographic transcript of the hearing.

3. The question of whether Cytec's boiler was operating under interim status at the time of the Region's inspection in 1993 is discussed below in the section on the "permit-as-shield" issue.

4. As most recently amended on December 6, 1996, 40 CFR §262.34(a)(1)(ii) now requires generators who store waste in tanks for 90 days or less to comply with Subparts J, AA, BB and CC of Part 265.

5. In its post-hearing brief, the Region at first argued that the entire exemption for 90-day accumulation tanks was removed by the exception of §265.1050(a) to the applicability of §266.103(a)(4)(viii). (See quote above, p. 15). Without further examining the nuances of this convoluted argument, it is noted that it is contrary to the testimony of the Region's own witnesses, and would directly contradict the note at the end of §265.1050. The Region did not mention this argument, and thus appeared to abandon it, in its reply brief.

6. In February 1992, Cytec, following normal EPA permitting practice, submitted an application for a permit renewal and revision that would add the hazardous waste boiler as a newly regulated unit into a single combined permit. (FF #8; Exs. 20, 21). EPA has not yet acted on that permit application. Hence, this permit application has no effect as a shield.