UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

BEFORE THE ADMINISTRATOR

IN THE MATTER OF	**)**	
	)	
CITY OF MARSHALL,	**)**	**Docket No. CWA-5-98-013**
	)	
Respondent	**)**	

Initial Decision

Introduction

In this administrative complaint brought under Section 309(g) of the Clean Water Act ("CWA" or "Act"), EPA has alleged that the City of Marshall (the "City") in connection with its operation of a wastewater treatment plant, violated the CWA during the application of sewage sludge to agricultural land. According to EPA, the sludge violated the Act in two respects: it had excess levels of molybdenum and an insufficient reduction of disease causing organisms.

Specifically, the Complaint alleges that on various dates from August 1994 through December 1996, the molybdenum concentration limit of 75 milligrams per kilogram for the land application of sewage sludge[1] was exceeded, violating 40 C.F.R. 503.13(a), ("the molybdenum violation" or "Count I"), and that, on various dates in February and March 1994, the City failed to satisfy the Class A or Class B pathogen reduction requirements before applying sludge to land, in violation of 40 C.F.R. 503.15(a)(1), ("the pathogen violation" or "Count III"). Upon Motion by EPA, Count II was dropped.[2] EPA seeks a total civil penalty of $52,000 for the remaining (I and III) Counts,[3] a

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[1]"Sewage sludge" or "sludge" refers generally to the solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. See 40 C.F.R. § 503.9 (w) for a more detailed definition of this term.

[2]As originally filed, Count II alleged that the Respondent failed to sample and/or analyze sewage sludge applied to agricultural land for Kjeldahl nitrogen and ammonia nitrogen, as required by 40 C.F.R. § 503.8(b)(4). On April 12, 1999 EPA filed a Motion to withdraw Count II. The original Complaint sought $54,000 for the three counts while the Amended two count Complaint reduced the penalty proposed to $52,000. The Court granted EPA's Motion on May 7, 1999.

[3]The City filed a Motion for Accelerated Decision, arguing that it should prevail as to Count I, on the grounds that, as it had complied with the October 16, 1996 Administrative Order ("AO"), that Count should be dismissed. The Motion was denied on May 7, 1999. At the hearing the Court explained that the denial was based on the fact that the dates in the AO were

reduction from $54,000, the amount sought originally for all three counts.

The Molybdenum Violation

The regulation alleged to have been violated in Count I, 40 C.F.R. § 503.13(a),[4] provides:

> Sewage sludge. (1) Bulk sewage sludge[5] or sewage sludge sold or given away in a bag or other container shall not be applied to land if the concentration of any pollutant in the sewage sludge exceeds the ceiling concentration for the pollutant in Table 1 of § 503.13.

Table 1, in turn, provides a ceiling of 75 milligrams per kilogram for the pollutant molybdenum.

EPA witness, environmental engineer Valdis Aistars, is the sludge program manager for EPA Region 5. He testified that sludge is regulated because of pathogens and excessive amounts of metal it may contain.

Addressing Count I, Mr. Aistars explained that the molybdenum may enter the wastewater process from industrial sources, as it is found in paints, lubricants and oils, among other sources. Tr. 43. For molybdenum, EPA concluded that the "pathway," that is to say the means by which that metal would enter the environment, is absorption by plants and, thereafter, through ingestion by cows. Tr. 43. The witness explained that if land applied sludge exceeds the ceiling concentration for molybdenum there is a risk that it may enter the food chain through this pathway, resulting in molybdenosis, a condition

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not identical to those set forth in Count I and that the terms of the AO did not preclude such an action. Indeed, the AO expressly provides that "[n]either the issuance of this order by the USEPA nor compliance with this order by Marshall shall be deemed to relieve Marshall of liability for any penalty, fine, remedy or sanction authorized to be imposed pursuant to Section 309(b), (c), (d) and/or (g) of the CWA, including but not limited to any and all violations addressed in this Order." Joint Exhibit 4, 8. The City also contended that by undertaking construction of new pollution control facilities, 40 C.F.R. § 503.2A operated as a defense to Count III. The Court determined that sufficient factual issues remained and therefore denied that aspect of the motion as well.

[4]33 U.S.C. § 1345(e), the statutory basis for the regulation, provides: "...it shall be unlawful for any person to dispose of sludge from a publicly owned treatment works...for any use for which regulations have been established pursuant to subsection (d) of this section, except in accordance with such regulations."

[5]"*Bulk sewage sludge*" is defined as "sewage sludge that is not sold or given away in a bag or other container for application to the land." 40 C.F.R. §503.11(e).

that may result in damage or death to cattle.
Tr. 39.

The basis for EPA's case that the molybdenum ceiling was exceeded rests entirely upon the annual reports and associated data submitted by the City to EPA. Tr. 45. Exhibit JX 6 reflects the record of the sludge that was hauled and land applied for the City in 1994. Tr. 46. JX 7 and JX 8 are similar records, reflecting the same information for 1995 and 1996. These exhibits reveal, for each year, the number of loads of sludge that were land applied for each day of each month. Tr. 48-49. Each load amounts to 7,000 gallons. Using the exhibits, which amount to charts, one can determine the number of loads that were applied on any given day for each month. Tr. 49. These exhibits do not, however, by themselves inform whether the loads of sludge had excessive molybdenum. Tr. 50. To determine this, one must also consult exhibits, JX 1, JX 2 and JX 3, which are, respectively, the City's quarterly monitoring reports for 1994, 1995, and 1996.

As an example, at page 11 of JX 1 the average concentration of molybdenum is recorded as 94.55 mg./kg. That value reflects that, at some point during the monitoring period recorded on that page, which ran from July 1, 1994 through September 30, 1994, the City sampled their sludge and derived a maximum laboratory value of 94.55 during that period. [6] The corresponding maximum "permit requirement" of 75 is listed immediately below that figure. JX 1 at 11.

The actual laboratory sampling results or "bench sheets" are the original source for the concentration values and these are reflected in JX 25. That exhibit, consisting of 35 pages, reflects the lab results for the sludge sent by the City to MVTL Laboratories. The lab results reflect sludge analyses from May 1994 through November 1996. As an example, page 3 of the exhibit records[7] that on August 10, 1994 MVTL analyzed a sludge sample that was taken on August 8, 1994, resulting in a value of 94.55 mg/kg.[8] The witness also pointed to Exhibits JX 2 and JX 3,which reflect the "Annual Reporting Requirements for Class B Sludges" for 1995 and 1996, noting that under the monitoring period dates of September 28, 1995 and November 16, 1995 molybdenum values of 126.1

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[6]The witness contended that one could not tell whether the 94.55 "average" was based on one, or several, samples. Tr. 52. However, it seems improbable that more than one sample was taken during this period, at least for molybdenum, as the average concentration and the maximum concentration reflect the same 94.55 value.

[7]Although the poor quality of the copy makes it difficult to see, the date and pertinent value listed on page 3 are discernable, and reflect that the analysis was made from an August 8, 1994 sludge sample. No challenge was made to the figures identified on the copy.

[8]As another example, Exhibit JX 1, at page 14, covers a monitoring period from October 1, 1994 through December 31, 1994. As with JX 1 at page 11, the form at page 14 reflects "land application" with an average concentration value of 143.6. The maximum concentration value is an identical 143.6. This figure is also reflected at JX 25 at page 5, informing that the 143.6 value was derived from a November 23, 1994 sample taken from a "sludge storage tank."

and 176.1 were recorded together with values of 119.8, 108.3 and 129.3 for, respectively, October 14th, November 6th, and December 5, 1996. Unlike the 1995 Annual Report, the 1996 Report was accompanied by a cover letter. This letter informed EPA that the biosolids from November 6th and December 5th were not land applied and that a subsequent analysis reflected a molybdenum concentration of 67.33 mg/kg. In contrast, referring to the October 14th result of 129.3, the City acknowledged that those biosolids, which came from drying beds, were land applied prior to the City receiving the lab results. JX 3, at page 1.

The Pathogen Reduction Violation

For Count III, the regulation alleged to have been violated, 40 C.F.R. § 503.15(a), provides:

> *Pathogens - sewage sludge*. (1) The Class A pathogen requirements in §503.32(a) or the Class B pathogen requirements and site restrictions in § 503.32(b) shall be met when bulk sewage sludge is applied to agricultural land, forest, a public contact site, or a reclamation site.

The pathogens addressed include parasites, bacteria, such as E. coli, or viruses, all of which may end up at the treatment plant, as part of the wastewater. These present an obvious potential for harm to the public health and to the environment. Tr. 38. As the sludge in this case was applied to agricultural land, the Class B pathogen requirements apply. Section 503.32(b) provides that sewage sludge must be treated by one of the processes to significantly reduce pathogens as described in Appendix B.[9] This Appendix provides for a 15 day sludge digestion period at 35 to 55 degrees Celsius and a 60 day period where the temperature is only 20° Celsius.[10] Outside of these, a formula can be applied to determine whether other combinations of temperature and time will accomplish anaerobic digestion.[11] Tr. 61, 66.

There is no dispute that the City employs anaerobic digestion process at its wastewater plant, a method involving the decomposition of pathogens by means of their containment within an airless environment, for periods of time at certain temperatures. EPA maintains that the City did not satisfy those requirements during February and March of 1994. Tr. 71.

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[9]Other methods to achieve pathogen reduction include using lime (calcium carbonate), aerobic digestion, composting and air drying. Tr. 62.

[10]This is not the exclusive method to effect pathogen reduction. Other options include use of "lime" (calcium carbonate), aerobic digestion, composting and air drying. Tr. 62.

[11]The City did not challenge the validity of the formula, described at Tr.66-67 and set forth at Exhibit 32, for determining the pathogen residency requirement. The formula is: $3T + D \geq 120$, with T representing the average Celsius temperature and D, the average residence time.

As with the Molybdenum violation, EPA relies upon the City's records to establish this Count.[12] To do this, it looks to the digestion tracking sheets set forth in Exhibit JX 9. That document, pertaining to February 1994, is described by the heading "503 Compliance Tracking for Class B Pathogen Treatment and Vector Attraction Reduction." The bottom center of this document lists the "Average SRT." SRT or "Solid Retention Time" refers to the average number of days the sludge remained in the digester. The figures for February 1994 reflect 12.39 days, a duration less than the minimum retention time of 15 days. Using these records in conjunction with the City's sludge hauling records, EPA concluded that nearly a million gallons of sludge not meeting the pathogen reduction requirements were applied to land.

Exhibit JX 10, a parallel document to JX 9, but which pertains to March 1994, required consultation with a formula to determine the minimum number of days the sludge had to remain in the digester. This was necessary, even though the average residence time for the sludge was 18.04 days, because the average temperature, at 26.8° C., was well below the minimum 35° C. needed for a 15 day residency. The City did not challenge the conclusion that, at least based on JX 10, the sludge did not have sufficient time in the primary digester to satisfy the regulation but it maintains that the sludge went to a secondary digester before any land application. Tr. 80. In response, EPA maintained that the agency operates on the assumption that the representative sample is, by definition, representative of the sludge that is land applied. Tr. 81.

The City's Arguments

The City raises multiple objections to the charges in this litigation. It asserts that EPA's case offers no fact witnesses regarding the allegations and that EPA's entire case rests upon the Agency's interpretation of the applicable regulation together with its interpretation of documents that the City provided. Additionally, it argues that the phrase "representative sample" is unclear, that the regulation does not prohibit averaging the test results, and that, in any event, the regulation does not spell out the consequences for an elevated concentration. Last, Respondent contends that it is unfair to infer a continuous violation until new tests return to, or below, the ceiling limit. Specific discussion of these issues follows.

The City's argument begins with the undeniable premise that EPA must prove, by a preponderance of the evidence, that the alleged violations in fact occurred. From this starting point, the City takes the view that this burden encompasses "prov[ing] each allegation of every Count ... [including] the authenticity of scientific evidence ... the [meaning] of the phrase 'representative sample'...[and showing that the regulation makes it] unacceptable to average the required quarterly test results..." City Brief at 3. This burden includes demonstrating the accuracy of the laboratory testing, and identification of the bio-solids that were tested. Id. at 9. Further, the City believes that EPA must meet this burden for each of the 118 dates for Count I and, failing this, it argues that the entire Count should be dismissed. Id. at 12. Absent such proof, in its view, EPA's case rests upon conjecture,

[12]Count III asserts that sludge not meeting the pathogen requirements was applied to land on February 22, 23, 24, 25, 28 and March 1, 2, 9, 10, 11, 1994.

speculation, inference and supposition. Id. at 4.

Regarding Count I, the City notes that EPA produced no eyewitnesses to the sludge land application process and asserts that EPA's case rests upon the agency's "subjective interpretation of records submitted by the City." Id. at 5. In its view, EPA's own witness was vague in explaining what constitutes a representative sample or how one is taken. It submits, if EPA is uncertain about this, the regulated community cannot be expected to understand these matters. Noting that the regulation requires land-applied sludge to be tested only once per quarter, the City also objects to any suggestion that it must conduct more frequent tests.

The City also maintains that Section 503.8's requirement for "representative samplings"[13] allowed it to average its quarterly samples, a practice when applied in this case results in no molybdenum values above the ceiling concentration limit for any single year. In this vein, the City asserts that it did not become aware that averaging was impermissible until it received EPA's October 28, 1996 Administrative Order.[14]

Additionally, Respondent views EPA's position, that any test result with a value above the ceiling constitutes a violation, as a "strained and unreasonable interpretation [that is] inconsistent with the regulation itself." Id. at 7. Averaging samples, the City argues, represents a more accurate reflection of the actual land application practices.

The City also points to other deficiencies in the EPA case. It notes that while the Complaint refers to liquid sewage sludge, the test results used to show exceedances are not limited to *liquid* sewage sludge. The City points to the October 14, 1996 results, which pertained to *dry* sludge from its lagoon drying beds and it suggests that this sludge may have been mixed with other sludge. Id. at 10-11. Noting that the EPA witness, Mr. Aistairs, indicated some mixing occurred, (Tr.82) the City reiterates that proving such mixed sludge still exceeded the ceiling and showing which sludge was in fact then land applied are all part of EPA's evidentiary burden.

Analogizing its position to that expressed In the Matter of Bradley Petroleum Docket No. RCRA (9006)-VIII-94-08, April 23, 1998, 1998 WL 289275 (E.P.A.), ("Bradley"), where the complaint was dismissed because EPA failed to show that the methods used by the respondent for testing and monitoring would not comply with the regulation, the City asserts that EPA has not shown that its method to monitor compliance failed.[15]

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[13]The Court notes that the regulation actually requires "Representative samples," not "Representative *sampling*" of sewage sludge that is applied to the land.

[14]The Court further notes that the Administrative Order makes no reference to the subject of sample averaging, nor did the City direct the Court to such a reference.

[15]Presumably, the City is referring here to its claim that the regulation permits averaging sample results. Bradley is not remotely relevant to this matter. EPA alleged that Bradley had

With regard to Count III, the alleged failure to meet the pathogen reduction requirements, the City asserts that the sludge haul records for February and March 1994, relied upon by EPA to establish the violation, do not relate to same sludge held in residency during those months. The City points to Exhibits JX 2 and 16 to establish that it employed a two-stage treatment process. Further, it argues that since 1995 it has utilized the alternative sampling process set forth at 40 C.F.R. 503.32(b) by monitoring for fecal coliform. Id. at 15.

For both Counts, the City argues that 40 C.F.R. § 503.2(a) applies. That regulation provides:

> Compliance with the standards in this part shall be achieved as expeditiously as practicable, but in no case later than February 19, 1994. When compliance with the standards requires construction of new pollution control facilities, compliance with the standards shall be achieved as expeditiously as practicable, but in no case later than February 19, 1995.

Emphasizing that the regulation became applicable on February 19, 1994 only for "those facilities that were not under construction," the City maintains that as it had embarked on such construction, the effective date for its wastewater plant did not come into effect until February 1995. Id. at 16. (emphasis in brief).[16] It was not contested that, in April 1992, the City voted to spend 5.2 million dollars to improve its treatment facility, completing the construction project in December 1994. In its view, the extension applies where the City believed, in good faith, that the construction was necessary to achieve compliance. It contends that it is unfair to determine whether the extension applies by examining whether the treatment plant is in compliance after the construction. Further, EPA's gauging the applicability of the extension on post-construction results ignores the City's use of fecal coliform monitoring as an alternative method of meeting the pathogen reduction requirements. Id. at 20.

The City also raises the defense of estoppel.[17] This contention relies upon the City's interpretation that by complying with the Administrative Order it would avoid further enforcement action. In this connection it lists the actions it took to come into compliance with that Order and asserts "[i]f the USEPA can use information requests under the pre-text (sic) of monitoring compliance with an Administrative Order, and then use information not required by law to be maintained to prove liability

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failed to provide a release detection method in accordance with the regulations and that the respondent's method was unreliable. Here, quite differently, EPA has based its case on the *accuracy* of Respondent's own records.

[16] If accepted, the effect of the City's interpretation would result in 62 days of the 118 days of violation in Count I being dismissed. All of the Count III allegations occurred before February 19, 1995.

[17] Under this heading the City also revisits the defense, already outlined, that by the terms of 40 C.F.R. 503.2, it had until February 19, 1995 to come into compliance.

for the same offenses, it would have a chilling effect ...[and] foster an adversarial relationship ... [instead of] cooperation. Id. at 18. At a minimum, it argues that its good faith cooperation should be considered as a factor mitigating the penalty.

In its Post-Hearing Reply Brief[18] the City objects to EPA's characterization of its conduct as evincing a blatant disregard for public safety and the federal regulations, as well as to EPA's description of the City's attitude toward sludge disposal as "deplorable" and the assertion that it would be "difficult to imagine more egregiously derelict behavior." City's Reply Brief at 1, citing EPA's Post-hearing Brief at 32.

EPA's Arguments

After noting that the regulations require the quarterly collection of representative sludge samples, EPA argues that the term 'representative' is not as elusive of definition as the City suggests, and submits that the sample must be representative of what the facility applied to the land for a given quarter. Similarly, the analytical results must reliably describe the sludge contents.

EPA does not dispute that of the 117 days of violation alleged in Count I, there is direct evidence of violations for only six of those days and that it relies upon "circumstantial evidence" for the other days. EPA's position is that "every land application which occurred between the date on which Marshall's sampling first indicated a violation and the date on which Marshall's sampling first indicated a return to compliance is a violation of 40 C.F.R. § 503.13(a)(1)." EPA Brief at 5. It argues that it is appropriate for the Court to "draw the reasonable inference that the violations continued until Marshall's sludge analysis demonstrated compliance." Id. at 4.

Regarding Marshall's challenge to the accuracy of the sampling results, EPA notes that the City, as the land applier of sludge, bears the responsibility for the sampling and the lab analysis.
In response to the City's argument that, because it does not apply *dry* sludge, the actual concentrations applied would be lower because the sludge, as applied, is diluted with water, EPA points out that the regulation, 40 C.F.R. § 503.13(b)(1), provides for compliance with the metal limits on a dry weight basis. Although EPA agrees that the City was under no affirmative obligation to conduct resampling, it notes that, once faced with the results showing an exceedance, there was an implicit obligation to resample before continuing with land application or to turn to the other options available for the sludge disposal.

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[18]The City and EPA each filed a Post Hearing Brief and two Replies. Each was duly considered by the Court. Beyond these objections, the City reasserts its argument that EPA's burden of production includes proof that the violations in fact continued after the alleged exceedance of the ceiling for molybdenum. As previously described, under the City's view, EPA is obligated to show "that there were actual applications of sewage sludge to the land ... for each and every date listed in Count I Exhibit A of the complaint." City Reply Brief at 2. Consistent with this assertion is the City's view that it is EPA's burden to show that the tests were accurate.

As to Count III, EPA argues that the City does not qualify for the one year extension from compliance provided by 40 C.F.R. § 503.2, as the extension, in its view, only operates where compliance *requires* construction of the new facilities. EPA takes the position that this means there can be no other disposal options, beyond land application, available to a wastewater treatment facility such as the City. Given the options available for both violations, such as liming, blending, incinerating, or landfilling the sludge, the extension should not apply. Additionally, EPA maintains that because the record shows that the City continued to violate the anaerobic digestion requirements for several months after the construction had been completed, this demonstrates that the project could not have been required to achieve compliance. Although the construction was complete by the end of December 1994, the record reveals that, through application of the formula, the City continued to violate the pathogen reduction requirements from January through March 1995. Thus, EPA maintains that eligibility for the extension requires a showing that, once the construction is complete, the result is that the facility *in fact* comes into immediate compliance.

In response to the City's argument that estoppel should be applied because of the City's claim that EPA's Administrative Order implied that no civil enforcement action would ensue if the City came into immediate compliance, EPA notes that the plain terms of the AO refute the claim.

DISCUSSION[19]

Issues Regarding Count I

1. *Whether EPA must provide witnesses to the sampling and land application process.*

The City notes that EPA provided no witnesses to verify the accuracy of the sampling nor witnesses to the land application process and that the Agency's case rests entirely upon records submitted by the Respondent. However, the City also concedes that the laboratory tests were performed by an entity hired by the City to do those tests. Tr. 32. Although the Court addressed the City's position during the hearing,[20] rejecting the argument that EPA must establish the reliability of the test results, additional comments are in order.

Section 503.7 provides:

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[19]Except for those issues specifically addressed in the body of this decision, all other determinations necessary for liability to attach are found to be present. These include, for example, that Respondent is an owner and operator of a publicly owned treatment works and generates sewage sludge during the treatment of domestic sewage. The decision focuses on the matters remaining in dispute.

[20] The Court also noted, and the City conceded, that it did not raise this argument in its Answer. Tr. 33. However, even if it had done so, the conclusions reached by the Court would be the same.

> **Any person who prepares sewage sludge *shall ensure* that the applicable requirements in this part are met *when the sewage sludge is applied to the land*...**

40 C.F.R. § 503.7 (emphasis added).

As EPA observes,[21] meeting the responsibility to "ensure that the applicable requirements in [the] part are met" includes the representative sampling and analysis of those samples. In this regard, Section 503. 8(a) provides: "**Representative samples of sewage sludge that is *applied to the land* ... shall be collected and analyzed**." 40 C.F.R. § 503.8(a) (emphasis added). These responsibilities belong to the preparer of sewage sludge.

Taking these provisions into account, together with the City's concession that "[t]he only item supported by the record is that the City, as required by the regulation, at some point took quarterly samples, and that some of these samples showed above 75 mg/kg of molybdenum." Id. at 13, establishes a prima facie case. In the Matter of City of Salisbury,Maryland , Docket No. CWA-III-219, 2000 WL 190658 (E.P.A.), February 8, 2000. Thus, attempts to deflect responsibility on the basis of putative vagueness by an EPA witness in defining a "representative sample" misses the mark; the burden to comply with the provisions reside with the preparer of sewage sludge. Nor is the term as elusive as the City suggests. A representative sample is simply "[o]ne that exemplifies or typifies others of the same class." Webster's II New College Dictionary (1995). The Respondent's witness, Mr. Keith Nelson, the City's engineer and director of public works, never expressed any confusion about the concept of a representative sample. Tr. 194. Nor did the witness believe that averaging

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[21]EPA, after noting that 40 C.F.R.§ 503.16 sets forth the frequency of monitoring, requiring in this instance quarterly data collection, asserts that "40 C.F.R. § 17(a)(4)(I)(A) requires Marshall to collect samples and analyze for all of the metals listed at 40 C.F.R. §503.13(b), including molybdenum." EPA Reply Brief at 2. However, the section EPA cites refers only to the Equal Access to Justice Act. Even 40 C.F.R. § **503**.17(a)(4)(I)(A) does not exist and if EPA actually meant 40 C.F.R. § **503**.17(a)(4)**(i)**(A), that section refers to recordkeeping and a retention period for such records, for the pollutants listed in Table 3 of §503.13 in the bulk sewage sludge. Consultation with Table 3 reveals that molybdenum is not one of the addressed pollutants. If EPA meant to refer to 40 C.F.R. §**503**.17(a)(**5**)(**i**)(A), that provision is triggered if the requirements in §503.13(a)(2)(i) are met when bulk sewage is applied to agricultural land, forest, a public contact site, or a reclamation site and requires development and retention of the concentration of each pollutant listed in Table 1 of § 503.13. Molybdenum is among the listed pollutants for that table. Regrettably, this is not an isolated incident. Even in the Complaint, EPA asserted, for Count I, that the Respondent's actions violated "33 U.S.C. §1415(e)." That section relates to "Ocean Dumping,"not land-applied sewage sludge. The Court has noted previously EPA's lack of attention to correct citations. See In the Matter of Pioneer Engineering Chemical Company , Docket No. RCRA 6-006-99, December 14, 1999, 1999 WL 1442333 (E.P.A.). Given the complexity of the regulations, EPA should correctly cite the provisions it relies upon.

samples excused one from the ceiling limit:

> The Judge: Mr. Nelson, you were never laboring under the idea were you that as long as you averaged out that it was okay to exceed the ceiling limit?
>
> The Witness: No, we did not believe it was okay to exceed the ceiling limits.

Tr. 195.

2. *Whether EPA established continuing violations for Count I, the Section 503.13(a) violation.*

The City argues that, even if a sample demonstrates an exceedance of a pollutant's ceiling concentration, it is unreasonable to conclude that all subsequent land applications of sludge also exceed the ceiling until retesting shows the concentration has returned to a level which is at, or below, the limit. Tied to this is the City's related argument that the regulation, 40 C.F.R. § 503.16, requires no more than quarterly testing.

The City notes that 40 C.F.R. § 503.16 requires sampling once per quarter[22] and that the regulation does not prescribe additional testing. While the City acknowledges that EPA has suggested additional testing in its guidance, it maintains that EPA is not entitled to deference in the interpretation of its regulations, citing In the Matter of Phibro Energy, Inc., CAA-R6-P-9-LA 92002 (1994)[23]

The Court finds that the inference of a continuing violation is reasonable. While it is possible that sludge subsequently generated may not in fact exceed the ceiling, it is also possible that the post-sample sludge may continue to violate the ceiling at, or even above, the sample result. Although the City is correct that the regulations do not mandate additional testing,[24] one cannot fairly object to the inference of a continuing violation while turning away from the opportunity to demonstrate that

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[22]The frequency of monitoring is keyed to the number of metric tons of sewage sludge applied per year. Where the tonnage is equal to or greater than 290 but less than 1,500 metric tons, quarterly monitoring is required.

[23]The Respondent incorrectly cited the case as "Philbro Energy, 1997." Phibro Energy, a Clean Air Act case, involved an interpretation of a regulation requiring timely performance evaluations of certain monitoring equipment. In Phibro, the administrative law judge did state: "The deference standard is an appellate review standard, and is not applicable at the trial level. At the trial level, the question is whether the interpretation contended for by the agency is reasonably supported by the language of the regulations and formal interpretative policy statements by the agency." 1994 WL 594881 (E.P.A.).

[24]EPA agrees that no additional testing is required by the regulations.

an exceedance of a pollutant ceiling has ceased. Further, the regulated community cannot have it both ways: complaining of government over-regulation and excessive regulatory presence and then, having succeeded in gaining the right to self-monitor compliance, turn around and assert that such over-regulation and omnipresence is required to establish any continuing violations.

It is noted that the inference is balanced and operates evenhandedly. Thus, when a quarterly sample shows no pollutant ceiling exceedances, the inference operates to insulate the wastewater treatment plant by presuming that all subsequent land applications for that quarter also satisfy those ceilings.

This conclusion also operates to resolve the City's related argument that it is EPA's burden to establish that the tested sludge is the same sludge that was land applied. The burden that representative samples be taken by those who generate the sludge makes clear that those samples are required to be representative of the sludge that is *applied to the land*. 40 C.F.R. §503.8(a).

3. *Whether the lack of a "Cumulative Load" for Molybdenum is relevant.*.

The City has pointed to the absence of a cumulative load limit for molybdenum, noting that many other pollutants have such a limit. A "cumulative load" refers to the maximum amount of a particular metal that can be applied to a parcel of land over its lifetime. Tr. 95, 40 C.F.R. § 503.11(f). However cumulative loads are irrelevant to liability in this proceeding. Although there is a *ceiling limit* for molybdenum, there is no cumulative load. Nor does the regulation cited by EPA for Count I make any reference to a cumulative load exceedance. Thus, in terms of liability for Count I, the only issue is whether the *ceiling limit* has been exceeded.

4. *Whether "Dry Bio-Solids" sample tests affect liability where the sludge is later applied as a liquid.*

The City perceives a conflict when a sludge sample from "Dry Bio-Solids" is later applied as liquid sludge. Observing that Exhibit JX 25 at p. 21 describes the October 14, 1996 sludge sample as "Dry Bio-Solids," it maintains that such lab results are not reflective of the actual land application since the sludge was applied as a liquid.

The Court notes that the various lab reports, reflected in JX 25 and which involve samples from April 1994 through December 1996, certainly provide a variety of descriptions for the sludge samples. While most samples are described as "liquid sludge" other descriptions include "sludge storage tank," "drying bed sludge," "liquid sludge composite," "sludge," and "Liquid Bio-Solids." Despite this variety, most reports reflect that the results are reported on a dry basis or dry weight. However, as EPA observes, the pollutant limits, as reflected in the table setting forth the ceiling concentrations for various metals, including molybdenum, provide that the limits are measured on a *dry weight basis.* 40 C.F.R. § 503.13(b)(1), Table 1. Thus the distinction the City attempts to draw between dry weight basis samples and liquid sludge applications is not relevant. Once a dry weight sample shows a value above the ceiling, land application is not permitted until the sludge has been modified to bring it back within the limit. Conspicuously, the City has not offered any

subsequent sampling results to support its suggestion that the liquid sludge it applied to the land had a molybdenum value which did not exceed the ceiling.

Issues Regarding Count II

Through the use of the City's own records, as reflected in Exhibits JX 6, JX 9 and JX 10, EPA has established a prima facie case that the pathogen reduction requirement for sewage sludge was not met. Although the City employed a tact similar to that advanced for Count I, by asserting that the sludge haul records for February and March 1994 do not relate to the same sludge that was held in the digester, that argument is also rejected here. In the face of those records, the City suggests that its certification that the process they used met the proper pathogen reduction is evidence that they were in compliance.[25] However, given the records of the digester residency time, the certification means little.

The chief argument raised by the City, regarding Count II, is that the residency time should be doubled from that reflected in Exhibits JX 9 and 10. This argument, which relies primarily upon the testimony of the City's engineer, Mr. Keith Nelson, maintains that, by including the secondary digester in the computation, the true residency time was double the 12.39 days, reflected in JX 9 and the 18.04 days in JX 10.

During Respondent's cross-examination of Mr. Aistairs, the EPA witness acknowledged having no personal knowledge of the City's pathogen control practices. However, when counsel for the City suggested there was also a secondary digester used for pathogen reduction, the witness observed that no documents demonstrate that the sludge is held in a secondary digester. Tr. 80. In response to questions inquiring whether he knew if the samples were taken or whether samples were from the primary digester or the storage tank, the witness explained that the assumption is that the sample is representative of the sludge that is land applied. Tr. 81.

The problem with the City's argument is that the mere assertion of the presence of a secondary digester is insufficient to overcome the records showing an inadequate pathogen reduction residency for the sludge. The City's engineer testified to the presence of two primary digesters, each with a 300,000 gallon capacity, and also asserted that the sludge then travels to a secondary digester, with an approximate 600,000 gallon capacity. He acknowledged that the secondary digester is not heated. Significantly, the City maintains no records of the time sludge spends in this second digester. Tr. 202-204. Without records to support the secondary digester residency claim, there is insufficient

[25]Post-hearing, the City has denied that the regulation provides any formula for determining whether the digester time/temperature residency requirements have been met, and it notes that the regulation does not otherwise spell out how the "floating average" should be calculated. The problem with this argument is that the formula EPA presented went unchallenged during the hearing. Thus, at least on this record, the Court concludes that the formula is a reliable means for determining the minimum residency time and temperatures required for values not specifically addressed in the Appendix.

evidence to overcome the establishment of a violation, as demonstrated in JX 9 and JX 10. Nor is the City's alternative contention, that its fecal coliform tests prove that it met the pathogen reduction requirements, availing. Those tests did not commence until 1995 and on that basis alone they are not relevant to the March and April 1994, the time period addressed in Count III.

THE SECTION 503.2(a) DEFENSE

40 C.F.R. Section 503.2(a) provides:

> Compliance with the standards in this part shall be achieved as expeditiously as practicable, but in no case later than February 19, 1994. When compliance with the standards requires construction of new pollution control facilities, compliance with the standards shall be achieved as expeditiously as practicable, but in no case later than February 19, 1995.

This section, seemingly at odds with itself, is not a model of clarity. While the first sentence is unqualified in its command that compliance shall be achieved "in *no case* later than February 19, 1994," the next sentence retreats from that command, by offering a circumstance where compliance may indeed be extended, up to a year later. The *only* qualifier for entitlement to the one year extension is "[w]hen compliance with the standards requires construction of new pollution control facilities ..."

Thus, unrebutted evidence that compliance requires construction of new facilities affords sewage treatment works up to a one year extension from all of the Part 503 standards. Clearly the language of the section does not provide that an extension is contingent upon a facility coming into immediate and continuous compliance, as soon as the required construction is completed. Nor would it be reasonable to infer that a facility must attain regulatory perfection upon completion of the construction. Such a harsh interpretation would be at odds with the reality that new equipment frequently needs fine tuning. It is also possible that, having made such an expenditure, in good faith reliance on the civil engineers' advice, a facility could thereafter discover that still more needs to be done in order to achieve compliance. Further, the exemption speaks globally, requiring only a showing that "compliance with the standards requires construction." Thus, by its plain terms, a facility need not show that new construction was necessary for each standard cited; only a general showing that "compliance with the standards" is required for the extension to apply.

This conclusion is supported by the EPA's final rule for "Standards for the Use or Disposal of Sewage Sludge." 59 FR 9095, February 25, 1994. Without attaching conditions or any post-construction performance standard for eligibility, the Agency merely explained that an extension was available where compliance with the regulation "requires construction of new pollution control

facilities..." Id at 9098.[26]

Here, there is unrefuted evidence that the City determined, upon consultation with engineers, that construction of new pollution control facilities was required. Tr. 154-157,178, 187- 188, Exhibit JX 30. Certainly the City's expenditure of 5.2 million dollars for the project refutes any notion that the construction was a sham, intended merely to postpone being cited for violations for a year. Tr. 158-159. In addition, the City offered credible testimony that the installation of the trickling filters impacted the quantity of sludge production. Finally, it is noted that the extension does not insulate any facility from accountability for violations beyond February 19, 1995. Once that date passed, even if fine tuning new equipment, or upon a late discovery that the new

construction was still not sufficient, a facility is fully subject to the Part 503 standards and attendant civil penalties.

Given this determination, the instances of recognizable violations within Count I are reduced to include only those loads of land-applied sewage sludge occurring from September 28, 1995 through November 7, 1995, while the violations alleged for Count III, occurring during February and March 1994, are dismissed.

DETERMINATION OF AN APPROPRIATE PENALTY

In its original pleading, EPA sought a $54,000 penalty for three Counts. Under the amended Complaint EPA proposed a penalty of $52,000 for the remaining two Counts. EPA does not have a penalty policy for a presiding judge to consider in assessing Clean Water Act violations and EPA concedes that the Presiding Judge must look to the statutory factors. Tr. 11. Further, the Court notes that the record contains no evidence of EPA's allocation of penalty amounts ascribed for each statutory criterion for each Count, nor was any overall breakdown offered for any of the three Counts, as originally pled, nor subsequently, for the two Counts remaining in the Amended Complaint. Tr. 132. Nor, was there particular administrative certainty that the $54,000 originally sought was correct. As Mr. Aistairs explained, he inherited the file and the proposed penalty figure from another. When asked if he would reach the same valuation for the penalty, he responded: "I may have and I may not have." Tr. 116. The witness candidly conceded that even for the same violations, the proposed penalties are not always uniform. Tr. 124. Finally, EPA acknowledged that, in terms of computing an appropriate penalty, it offers no penalty calculation input and cedes the determination solely to the Court. Tr. 136-138.

As explained above, as a consequence of the Section 503.2(a) defense, only twelve instances of land-applied sewage sludge are recognizable violations. Section 309(g)(3) of the CWA, 33 U.S.C. § 1319(g)(3), provides that any penalty under this section shall take into account the nature, extent,

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[26]From the beginning to the final rule, no Agency announcement suggested the interpretation EPA now attempts to graft on to the rule for the extension period to apply. See E.P.A. Environmental News, December 1, 1992, EPA 92-R-249.

circumstances and gravity of the violation; the history of violations; the degree of culpability; the economic benefit derived from non-compliance; ability to pay; and such other factors as justice may require. Considering each of these factors, the Court concludes that a $6,000 penalty is appropriate.[27] Further, even if it had been determined that the Section 503.2 defense was inapplicable, the Court would have departed from the penalty proposed by EPA for the reasons which follow.[28] These reasons were also considered in arriving at the penalty imposed today.

As to the nature of the violation, it is noted that the City did not generate the molybdenum on its own. Rather, wastewater from industrial users was the source of the metal. While no excuse for exceeding the ceiling, it is still a factor to be considered in assessing a penalty. Second, the Court may take notice, in the penalty context, that there is no cumulative limit for molybdenum. Third, there was no evidence that any cattle actually developed molybdenosis in this instance.

In terms of the circumstances of the violations, the Court finds that the City's interpretation that it could take an average of the samples of sewage sludge, was not reasonable, given the plain terms of Section 503.8(a). Further, the City should have waited for the lab results before applying the sludge to land; to do otherwise renders the regulation a nullity. As Mr. Aistairs noted, once sludge exceeding the ceiling is applied, there is no remedy. The same is true where the pathogen reduction is not met. Tr. 110. It is also true that the City had alternatives to the agricultural land application. These included blending, incineration, and application at a landfill.

On the other hand, it is noted that early on the City did hire civil engineers and, in 1992, embarked on an expensive project, expending 5.2 million dollars for the construction of new pollution control facilities.[29] Testimony of the Mayor of the City of Marshall, Mr. Robert Byrnes, Tr. 154-158. Mr. Aistairs conceded that EPA was not aware that the City had employed engineers to help achieve compliance. Further, EPA already had arrived at its proposed penalty calculation prior to receiving information from the City regarding its construction of new pollution control facilities. Tr. 130. It would not be appropriate for the Court to view the violations here in the abstract, apart from consideration of the large expenditure, made early on, by this relatively small community to improve its wastewater facility. EPA's view, that for such a large expenditure to count in formulating a penalty, the facility would need to demonstrate instant and unblemished

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[27]It is noted that during the period covered by the Section 503.2(a) defense, there were 61 land applications involving 565 truckloads and that in the period after that time there were 56 land applications involving 574 truckloads. During the time covered by the defense, molybdenum concentrations ranged from 94.85 mg/kg to 143.6 mg/kg, while in the post-defense period, the concentrations ranged from 108.3 mg/kg to 176.1 mg/kg.

[28]The City repeats some of its points in addressing particular penalty criteria. The Court agrees that arguments can have applicability to more than one criteria.

[29]EPA's Mr. Aistairs acknowledged that the City expended in excess of five million dollars on their wastewater treatment facility. Tr. 121.

compliance thereafter, is far too harsh a view and inconsistent with the reality of post-construction adjustments. Further, the City continues to take its wastewater responsibilities seriously; it continues to consult with engineers to help ensure compliance with the standards for wastewater treatment. Tr. 160. Suggestions by EPA that the City intentionally or recklessly disregarded the AO are unfair characterizations, unsupported by the record.

Regarding the prior history of violations, the city had no prior environmental violations nor has it been charged with any subsequent to the matters in issue. It has been recognized by awards from the Minnesota Pollution Control Agency for the operation of its wastewater facility. As EPA concedes, the City derived no economic benefit from noncompliance. The City's sludge applications are made without charge, as a service to the agricultural community.

Although the Court rejected the City's cooperation and submission of documentation to EPA as a defense to liability, it is true that it cooperated with EPA throughout the matter. As noted by the City, it "accepted and complied with the USEPA's wishes at all times subsequent to the filing and responses to the administrative order." City Brief at 9. This cooperation included promptly

providing all "USEPA information requests and deliver[y] [of] information not required by the regulation to the EPA that has been used in [the] proceedings to prove liability. Id. at 9.

Upon consideration of all these factors, the Court concluded that the $6,000 penalty is appropriate.[30]

ORDER

A civil penalty in the amount of $6,000 is assessed against the Respondent, City of Marshall, Minnesota. Payment of the full amount of the civil penalty assessed shall be made within thirty (30) days after this Initial Decision becomes a final order under 40 C.F.R. § 22.27(c). Payment shall be submitted by a certified check or cashier's check payable to the Treasurer, United States of America and mailed to:

Mellon Bank
EPA Region 3
Regional Hearing Clerk
P.O. Box 360515
Pittsburgh, PA 15251

A transmittal letter identifying the subject case and the EPA docket number, plus the Respondent's name and address must accompany the check. Failure of the Respondent to pay the

[30]Had the Section 503.2(a) defense not been accepted, the Court, looking at the same statutory criteria and the particular facts, as outlined above, would have imposed a total penalty of $12,000 for Counts I and III.

penalty within the prescribed statutory time frame after entry of the final order may result in the assessment of interest on the civil penalties. Pursuant to 40 C.F.R. § 22.27(c), this Initial Decision shall become a final order forty-five (45) days after its service upon the parties and without further proceedings unless (1) a party moves to reopen the hearing within twenty (20) days after service of the Initial Decision, pursuant to 40 C.F.R. § 22.28(a); (2) an appeal to the EAB is taken from it by a party to this proceeding, pursuant to 40 C.F.R. § 22.30(a), within thirty (30) days after the Initial Decision is served upon the parties; or (3) the EAB elects, upon its own initiative, under 40 C.F.R. § 22.30(b), to review the Initial Decision.

So Ordered.

William B. Moran
United States Administrative Law Judge

Dated: October 3, 2000

In the Matter of City of Marshall, Respondent
Docket No. 5-CWA-98-013

CERTIFICATE OF SERVICE

I certify that the foregoing **Initial Decision**, dated October 3, 2000, was sent this day in the following manner to the addressees listed below:

Original by Regular Mail to:

Sonja R. Brooks
Regional Hearing Clerk
U.S. EPA
77 West Jackson Boulevard
Chicago, IL 60604-3590

Copy by Regular Mail and facsimile to:

Attorney for Complainant:

Robert S. Guenther, Esquire
Associate Regional Counsel
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Copy by Facsimile and Certified Mail to

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_____

Maria Whiting-Beale
Legal Assistant

Dated: October 3, 2000