Report of the Committee on the Environment

I. Clean Air Act Developments

The Environmental Protection Agency (EPA) labored in 1991 to develop an enormous body of rules to implement the Clean Air Act Amendments of 1990.[1] While the EPA made progress, developing draft rules for some programs and publishing proposed rules for others, it did not issue final rules for the ozone nonattainment, toxics, and acid rain programs.

At least two key components of the acid rain program[2] were delayed in a political battle with the White House: EPA's proposed part 76 nitrogen oxide (NO_x) control rule and the final part 70 rules for operating permits. The NO_x rule was delayed when the Department of Energy and the White House Council on Competitiveness objected to the EPA's interpretation of "low NO_x burner technology," which would require utility boilers to install expensive "overfire air" for NO_x control.[3] Similarly, the White House opposed the EPA proposal to eliminate fast-track review for minor permit modifications under the draft operating permit rule.[4] The operating permit rule is the keystone for implementing the entire act, as it will govern the issuance of operating permits to enforce the ozone, toxics, and acid rain program.

The most recent development is the EPA's issuance of proposed rules for implementing the acid rain program.[5] The December 1991 proposal includes four of the six rulemakings that comprise the bulk of the EPA's acid rain program under Title VI. These four proposed rulemakings include: (1) the acid rain permit rule (Part 72),[6] which will regulate designated representatives, emission control plans, permit issuance and appeals, and the infamous "phone queue" method for allocating "reserve" allowances to utilities that plan to install scrubbers in Phase I; (2) the allowance system (Part 73),[7] which will govern trading and tracking of sulfur dioxide (SO_2) allowances;[8] (3) the continuous emissions monitoring system (Part 75),[9] which will require affected sources to install monitoring equipment to verify SO_2 reductions; and (4) the excess emissions program (Part 77),[10] which will impose penalties for

1. Pub. L. No. 101-549, 104 Stat. 2399-2712 (1990).

2. The acid rain provisions appear in Title IV of the Act, 104 Stat. 2584-2634 (1990). For a general discussion of Title IV, *See* 12 Energy L.J. 399-416 (1991).

3. *See* EPA, Inside EPA at 2 (Feb. 7, 1992); EPA, Inside EPA at 1 (Jan. 3, 1992).

4. *See* EPA, Inside EPA at 6-8 (Feb. 7, 1992) (publishing disputed portions of the January 27, 1992 draft final rule); Operating Permit Rule, 56 Fed. Reg. 21,712 (1991) (to be codified at 40 C.F.R. Part 70). *See also* Staff of House Subcomm. on Health and Environ., A Clean Air Case Study: The Saga of EPA's Permit Rule (Feb. 7, 1992).

5. Acid Rain Program: Permits, Allowance System, Continuous Emissions Monitoring, and Excess Emissions, 56 Fed. Reg. 63,002 (to be codified at 40 C.F.R. 72, 73, 75 and 77) (proposed Dec. 3, 1991).

6. 56 Fed. Reg. 63,002, at 63,098 (1991).

7. *Id.* at 63,266.

8. An allowance authorizes the holder to emit one ton of SO_2 in a single year.

9. 56 Fed.Reg. 63,002, at 63,291 (1991).

10. *Id.* at 63,336.

failure to comply with the applicable SO_2 and NO_x emission requirements.[11]

A. The Acid Rain Permit Rule (Part 72)

Proposed part 72 is the primary provision of the acid rain program. Utilities will use part 72 to select their designated representatives for affected units, to choose their compliance options, to prepare permit applications, and to seek Phase I reserve allowances to offset the cost of installing scrubbers.[12]

1. Who and What Must Comply?

The Phase I rules apply to: (1) existing units listed in Appendix A; (2) qualifying substitution units; (3) qualifying compensation units; and (4) units that elect to become a Phase I affected unit (Phase I "opt-in" unit). Phase II affects the Appendix A existing sources subject to Phase I, plus: (1) the existing units listed in Appendix B of part 72; (2) new units; (3) certain steam cogeneration units; and (4) Phase II opt-in units.[13]

The Acid Rain Advisory Committee (ARAC) sessions considered whether multiple owners of a single unit should be "jointly and severally" liable for violations of the acid rain requirements. Currently, the EPA's proposed rule does not impose joint and several liability. However, proposed section 72.7(e) would provide:

> whenever any requirement or prohibition of [EPA's acid rain program] applies to an affected source, or to the owner(s), operator(s), or the designated representative of an affected source, the requirement or prohibition shall apply to and be fully enforceable against each owner and operator . . . each of whom shall . . . be liable . . . to comply . . . and for any violation . . . .[14]

In addition, section 72.20 in subpart B similarly provides that "each owner of an affected unit with multiple owners shall . . . be liable for the unit's compliance . . . and for any violation. . . ."[15] The EPA explains that as a practical matter, "where there are violations in situations involving multiple persons, it will ordinarily focus its enforcement activities on persons responsible for the violations."[16] The EPA also recognizes owners and operators may contractually apportion their financial responsibility for violations through indemnity agreements.[17]

One of the guiding principles of the acid rain program is that it will encourage voluntary compliance and accountability.[18] To this end, proposed section 72.9 requires the designated representative to include with each submission a signed statement certifying: (1) that the designed representative has obtained authority from the owners and operators to take the relevant action

11. The acid rain rule also will generate a plethora of new EPA forms. *See Id.* at 63,176-63,351 (proposed Part 72, App. C).

12. 56 Fed. Reg. 63,002, at 63,005 (1991).

13. *See Id.* at 63,112.

14. *Id.* at 63,107.

15. *Id.* at 63,108.

16. *Id.* at 63,007-08.

17. *Id.*

18. *See Id.* at 63,007, 63,010.

(e.g., submitting a permit application) in compliance with the procedure specified in the representation agreement; and (2) that under penalty of perjury "the information is on knowledge and belief true, accurate, and complete."[19] Proposed section 72.9 also requires the designated representative to state that they are "aware that there are significant penalties for submitting false or incomplete information, including the possibility of fine or imprisonment."[20]

2. Designated Representatives of Multiple Units and Multiple Owners

Proposed subpart B establishes the procedures for certifying a designated representative and the duties thereof. Section 408(i) of the Act does not allow a permit to be issued until the designated representative has filed a certificate of representation.[21] Proposed section 72.20(a) provides that no allowance transaction may be recorded (under EPA's proposed Part 73 Allowance Tracking System) until a designated representative of the affected source has filed a complete certificate of representation with the EPA.[22] The proposed rules allow a company to have different designated representatives for different powerplants (i.e., sources).[23] However, because the rules would allow only one designated representative per plant, a company could not appoint different designated representatives for different units within a multi-unit plant.[24]

In the case of plants with multiple owners or customers with life-of-the-unit contracts, the designated representative must certify that "allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in proportion to each owner's legal, equitable, leasehold, or contractual reservation or entitlement,"[25] unless the multiple owners have expressly agreed to a different distribution. The EPA proposal would not require multiple owners to reach unanimous agreement on either the certificate of representation or as to the allowance allocation agreement.[26] The EPA reasoned that because a source could not obtain a permit, engage in allowance transactions or even operate until it had a designated representative, requiring unanimity would give undue leverage to dissenters.[27]

3. Permit Application Deadlines and Contents

Proposed subpart C outlines the deadlines for submitting permit applications and the information required within the applications.[28] Permit applications will be due on February 15, 1993, for Phase I units. Each application must include, among other things, a Monitoring Plan approved by the EPA under part 75, and a Compliance Plan specifying one or more acid rain com-

19. *Id.* at 63,017.
20. *Id.* at 63,018.
21. 42 U.S.C.A. § 7651g(i) (West Supp. 1991).
22. 56 Fed. Reg. 63,002, at 63,108 (1991).
23. *Id.*
24. *See Id.* at 63,009.
25. *Id.* at 63,108 (to be codified at 40 C.F.R. § 72.20(b)(6)).
26. 56 Fed. Reg. 63,002, at 63,108 (1991).
27. *Id.* at 63,007-08.
28. *Id.* at 63,110.

pliance options for each affected unit.[29] Designated representatives are encouraged to seek conditional approval of more than one option in the initial permit application.[30] Thereafter, the representative may notify the EPA of the source owners' decision to "activate" one of the options using the administrative amendment procedures of section 72.303.[31]

4. Acid Rain Compliance Options

Both the Act and the EPA's proposed rules provide various alternative compliance options that affected units may utilize in complying with the acid rain emission limitations.[32] Generally, the compliance plan must specify which of these alternative options have been chosen for the unit.[33] However, no special compliance plan would be required to fuel switch or to install control equipment unless the installation was made to qualify for a Phase I extension, repowering, or certain other NO_x alternative options.[34] The proposed subpart D options are described below.

a. Phase I Compliance Options

i. Substitution Plans (SO_2)

Proposed section 72.41, in effect, allows the designated representative to substitute one of their Phase II existing units (listed in Part 72, Appendix B) for one of their Phase I units (listed in Appendix A).[35] To do so, the designated representative must demonstrate that the plan will achieve the same or greater SO_2 emission reductions as would have been required with the plan.[36] If the substitution plan is approved, the Appendix B "substitution unit" will be required to make Phase I SO_2 reductions in place of the Appendix A unit. In addition, the Appendix B substitution unit would be required to make acid rain NO_x reductions earlier than if it remained a Phase II unit.[37]

ii. Phase I Extension Plans and Early Ranking—The Phone Queue Dispute

Section 404(d) of the Act[38] allows a Phase I unit to apply for a two-year extension of the Phase I SO_2 compliance deadline, from January 1, 1995, to January 1, 1997, provided that the owner or operator holds allowances to emit not less than the unit's total annual emissions for each of the two years, and provided that they install "qualifying phase I technology" at the affected

29. *Id.* at 63,111.
30. *See Id.* at 63,012, 63,014.
31. *Id.* at 63,014.
32. *Id.*
33. *Id.* at 63,111.
34. *Id.*
35. *Id.* at 63,014-15.
36. *Id.*
37. *Id.*
38. 42 U.S.C.A. § 7651c(d) (West Supp. 1991).

unit.[39] Additionally, the owners and operators of a Phase I unit may qualify for an extension by transferring the unit's Phase I reduction obligations from the affected unit (transfer unit) to another unit (control unit) that employs qualifying phase I technology.[40] The term "qualifying phase I technology" is defined in Title VI as "a technological system of continuous emission reduction which achieves a ninety percent reduction"[41] in emissions of SO_2. For the most part, this means flue gas desulfurization units (scrubbers).

Under EPA's proposed section 72.42(a), the Phase I extension option is theoretically available to all Appendix A units and Appendix B control units designated as Phase I affected units because of their inclusion in a substitution plan or a reduced utilization plan.[42]

The Act directs the EPA to establish a limited reserve of up to 3.5 million allowances,[43] which are distributed to Phase I extension applicants to cover SO_2 emissions in excess of allocated allowances from the extension unit during 1995-97. It also requires the EPA to act on applications "in order of receipt."[44] When no more allowances remain in the reserve, the EPA must deny applications still pending.

Because the extension reserve is likely to be oversubscribed, the EPA recognized that there will be numerous extension applications on the first day applications may be submitted.[45] Therefore, the agency considered several options for determining who is first in line, including a rock concert ticket line approach, a date and time stamp approach, a lottery, a pro rata distribution, and a phone queuing procedure.

In subpart L of part 72,[46] the EPA proposed a modified phone queuing method followed by a written confirmation sent by certified mail in order to determine which units receive allowances for their extension requests.[47] The EPA calls this method its "Early Ranking System." If EPA adopts this method in the final rule, the EPA will issue a personal identification number to each designated representative (DR PIN #) within thirty days after the EPA receives a certificate of representation from the representative. The EPA will then notify the representatives of the date set for the phone queue.

Thereafter, beginning at 8 A.M. eastern standard time on that date, designated representatives of Phase I units may call the EPA. Representatives must enter an identification number for the extension unit, his or her DR PIN number, and then register by voice mail the units applying for the Phase I

39. *Id.*
40. *Id.*
41. *Id.*
42. 56 Fed. Reg. 63,002, at 63,114 (1991).
43. 42 U.S.C.A. § 7651c(a)(2) (West Supp. 1991).
44. 56 Fed. Reg. 63,002, at 63,114 (1991).
45. *Id.* at 63,018.
46. *Id.* at 63,148.
47. EPA proposed the early ranking procedure in a separate subpart in order to permit expedited rulemaking. *Id.* at 63,018, 63,041.

extension. The voice mail system will register the time of the call. The designated representative may then perfect their place in line by submitting a complete, written Phase I Extension Early Ranking application to the EPA by certified mail postmarked no later than midnight of the same business day of his "early ranking" phone call.[48]

The EPA rejected the pro rata distribution method favored by utility representatives at the ARAC meetings, because the Act's "in order of receipt" language appeared to preclude that method.[49] However, with the assistance of EEI, utilities with Phase I affected units negotiated a side-bar agreement under which the winners of the phone lottery will agree in advance to reallocate their allowances on the basis specified in the agreement, presumably pro rata. The National Association of Regulatory Commissioners (NARUC) approved a resolution that supports the use of the pro-rata redistribution.[50] The EPA indicated it has no objection to this private redistribution.[51]

iii. Reduced Utilization Plans

Another alternative compliance option for Phase I is the reduced utilization of higher emitting units and replacing the lost electricity generation through increased utilization of lower emitting units.[52] Section 408(c)(1)(B) of the Act provides that an affected source may meet the Phase I SO_2 or NO_x requirements by reducing utilization of the affected unit as compared to its 1985 baseline or by shutting down the unit.[53] To qualify for this option, the compliance plan must either specify the unit(s) that will provide electrical generation to compensate (compensating units) for the reduced output at the affected source or the plan must demonstrate that the "reduced utilization will be accomplished through energy conservation or improved unit efficiency."[54] Generally, if a Phase I affected unit is "under-utilized" and its compliance plan does not specify a compensating unit or make the requisite conservation or efficiency demonstrations, the affected unit will be out of compliance. However, notwithstanding this general rule, Congress ordered that the EPA's regulations "shall not prohibit or affect" temporary shifts in utilization due to normal dispatching procedures or in response to emergencies.[55]

The EPA proposes to implement these policy objectives with two rules in subpart k: one will include an allowance accounting procedure for under-utili-

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48. 56 Fed. Reg. 63,002, at 63,148 (1991).

49. *See* 42 U.S.C.A. § 7651c(d)(3) (West Supp. 1991).

50. *NARUC Backs Utility Plan to Pool Scrubber Incentive Allowances*, Elect. Util. Week, Nov. 18, 1991, at 15.

51. Nor would today's proposal preclude side-bar pro rata agreements between applicants, should utilities wish to pursue such arrangements. The EPA would have no involvement, however, with such agreements. 56 Fed. Reg. 63,002, at 63,041 (1991).

52. *Id.* at 63,018 (1991).

53. 42 U.S.C.A. § 7651g(c)(1)(B) (West Supp. 1991).

54. *Id.*

55. 42 U.S.C.A. § 7651b(d)(2) (West Supp. 1991).

zation due to energy efficiency or conservation, while the other will address unplanned under-utilization and load shifting incident to dispatching or forced outages.[56] The EPA's position on unplanned under-utilization was hotly disputed during the ARAC meetings and met further opposition in comments on the proposed rule in February 1992.[57] Utilities, however, won a significant victory when the EPA reversed its previously stated position and proposed not to impose Phase I NO_x emission limitations on otherwise unaffected units (e.g., Appendix B units) designated as compensating units in an approved SO_2 reduced utilization plan.[58]

iv. Phase I NO_x Compliance Deadline Extension Plans

Proposed section 72.48 allows a designated representative of a coal-fired boiler to apply for a 15-month extension of the Phase I NO_x emission limitation.[59] To qualify, the representative must demonstrate "to the satisfaction of the Administrator that the technology necessary to meet such requirements is not in adequate supply to enable its installation and operation at the unit, consistent with system reliability, by January 1, 1995."[60] In addition, proposed section 72.48 addresses the procedures for EPA consideration of extension requests. The EPA's part 76 NO_x rule describes the substantive showing that an applicant must make.

b. Phase II Compliance Options

i. Repowering Extensions for the Phase II SO_2 Deadline

Under section 409 of the Act, the EPA may grant a four-year extension of the Phase II SO_2 emissions reduction deadline of January 1, 2000, to owners of existing units demonstrating that the units will be "repowered" with a qualifying clean coal technology.[61] Section 402(12) of the Act defines "repowering" as the "replacement of an existing coal-fired boiler with one of the following clean coal technologies . . . ."[62] The EPA interprets this to preclude projects that traditionally have been considered repowering projects by the industry but do not involve the complete replacement of the boiler.[63] In addition, the EPA interprets the Act to allow extensions for three major categories of repowering technologies: (1) technologies such as fluidized bed combustion listed in section 402(12);[64] (2) derivatives of one more of the listed technologies; and (3) technologies which are capable of controlling multiple combus-

56. 56 Fed. Reg. 63,002, at 63,019 (1991).
57. *See generally id.* at 63,018-24.
58. *Id.* at 63,022.
59. *Id.* at 63,126. Requests for this extension must be submitted no later than December 31, 1994.
60. *Id.* at 63,127.
61. 42 U.S.C.A. § 7651h(a) (West Supp. 1991).
62. *Id.* at § 7651a(12).
63. 56 Fed. Reg. 63,002, at 63,026 (1991).
64. 42 U.S.C.A. § 7651a(12) (West Supp. 1991).

tion emissions simultaneously, with improved boiler or generation efficiency, and with significantly greater waste reduction than technologies in widespread commercial use as of November 15, 1990.[65]

ii. New Unit Compliance Plans

Proposed section 72.45 requires each new unit that commences operation between November 15, 1990, and January 1, 2000, to comply with the Phase II acid rain requirements beginning on January 1, 2000.[66] Compliance includes the requirement to hold allowances in the unit's Allowance Tracking System subaccount not less than the unit's SO_2 emissions for the year and to comply with the Part 76 NO_x emissions limitation.[67] The designated representative of a new unit must submit a permit application and a "new unit compliance plan" by either January 1, 1998, or twenty-four months before the unit commences operation and begins to emit SO_2 and NO_x, whichever is later.[68] New units that commence commercial operation between November 1990 and 1995 will receive certain allowances under section 405(g)[69] of the Act and part 73.[70] However, new units that commence operations after 1995 will receive no allowances. Instead, owners of these units must purchase allowances on the market.[71]

c. Alternative Plans Available in Both Phases I and II

i. NO_x Emission Averaging Plans

Section 407(e) of the Act allows two or more units subject to a NO_x emission limitation to petition the permitting authority for "alternative contemporaneous annual emission limitations" for the units. However, the EPA's proposed section 72.46 describes only the procedural requirements for submitting a NO_x emissions averaging plan for approval.[72] The substantive requirements will appear in the EPA's part 76 NO_x rule.[73]

ii. NO_x Alternative Emissions Limitations Plans

Section 407(d) of the Act requires EPA (or a state permitting authority in Phase II) to authorize an emission limitation less stringent than the applicable NO_x limitation if the agency determines: "(1) a unit . . . cannot meet the applicable limitation using low NO_x burner technology . . . [or] (2) a unit . . . cannot meet the applicable rate using the technology on which the Adminis-

65. 56 Fed. Reg. 63,002, at 63,024-27 (1991).
66. *Id.* at 63,123.
67. *Id.*
68. *Id.*
69. 42 U.S.C.A. § 7651d(g) (West Supp. 1991).
70. 56 Fed. Reg. 63,002, at 63,266 (1991).
71. *Id.* at 63,027.
72. *Id.* at 63,124.
73. *Id.*

trator based the applicable emission limitation."[74]

Most of the controversy surrounding the EPA's implementation of this section has revolved around the proper regulatory definition of "low NO_x burner" (LNB) technology, and whether the EPA's rules should allow a company to qualify for an alternative NO_x emission limitation if it uses a technology other than that defined by the EPA as LNB. These substantive issues will be addressed in part 76.[75] Proposed section 72.47 merely sets out the procedural hurdles for obtaining a NO_x Alternative Emissions Plan, but defers to the NO_x rule for the definition of LNB and "appropriate control equipment."[76]

d. Common Stack Plans

Proposed section 72.50 provides that where an affected unit shares a common stack with a non-affected unit, and the owner or operator has not demonstrated under part 75 that the emissions can be separately monitored, both units must operate under a "common stack plan," and both will be treated as affected units required to comply with the acid rain program's emission limitations.[77] If the units sharing a common stack have SO_2 emissions exceeding the SO_2 allowances held in aggregate for the units, or if their NO_x emissions exceed the applicable NO_x limitations, all of the units would be in noncompliance.[78] Upon this determination, the owners and operator of all of the commonly-ducted units would share responsibility for bringing the units into compliance and for any penalties.[79]

e. Acid Rain Permit Revisions and Fast-Track Modifications

Significant acid rain permit revisions will be subject to public notice and comment operating permit modifications under part 70, section 70.7(d).[80] For example, any relaxation of a monitoring requirement or incorporation of a new method of compliance not previously submitted must be handled as a permit modification.[81] However, in section 72.302, the EPA proposes to allow some minor revisions of acid rain permits to be handled under one of two alternative "fast track modification" options.[82] The EPA's decision may be influence by the outcome of a similar fast track method in the EPA's proposed part 70 operating permit rule.[83]

74. 42 U.S.C.A. 7651f(d)(1),(2) (West Supp. 1991).
75. *See* 56 Fed. Reg. 63,002, at 63,030 (1991).
76. *Id.* at 63,125.
77. *Id.* at 63,030.
78. *Id.* at 63,128.
79. *Id.*
80. 40 C.F.R. § 70.7(d) (1991).
81. 56 Fed. Reg. 63,002, at 63,143 (1991).
82. *Id.*
83. *See* 22 Env't Rep. 1739 (Nov. 8, 1991); EPA, INSIDE EPA at 6-8 (Feb. 7, 1992).

B. Proposed Allowance System Rule (Part 73)

The purpose of the EPA's proposed allowance system rules is to provide: (1) neutral, low-cost rules of exchange; (2) basic tracking information ensuring that emissions do not exceed available allowances; and (3) certainty that a person offering to transfer allowances actually has authority to do so.[84] To accomplish this, the EPA proposes to establish allowance accounts for each affected unit and for any other person likely to hold allowances.[85] Allowances initially allocated to a unit by the EPA under the Act or the proposed rules would be held in that unit's allowance account. Each allowance account would be further divided into subaccounts to hold allowances for each year.[86]

At the end of each year, the EPA would determine whether a unit had met its annual SO_2 emissions control requirements by deducting the tons of SO_2 emitted during the year (as recorded and reported pursuant to the EPA's proposed part 75 emissions monitoring rules) from the available allowances in the unit's subaccount for that year.[87] If the unit had more than enough allowances to cover its SO_2 emissions for the year, the EPA would allow the unit to carry the unused allowances forward and bank them for the next year. If the unit's SO_2 emissions exceeded its available allowances, the EPA would deduct the needed allowances from the unit's subaccount for the following year, in an amount equal to the unit's "excess emissions." In addition, the EPA requires the unit to submit an "excess emissions offset plan" under proposed part 77.[88]

The EPA has proposed January 30 as the deadline for recording allowance transfers. No allowance could be used for complying with a unit's SO_2 emissions limitation unless the allowance were recorded in that year's subaccount by January 30 of the following year.[89] The EPA will not request or record the price and terms for allowance transfer, preferring to rely on other public channels [such as the Chicago Board of Trade] for the dissemination of price information.[90]

C. Proposed Continuous Emissions Monitoring Rule (Part 75)

Another key component of the EPA's December 3, 1991, proposal is part 75,[91] which would implement the continuous emissions monitoring system (CEMS) requirement in section 412 of the Act.[92] As required by the Act, CEMS technology must be installed, operational, and certified: (1) by November 15, 1993, for Phase I units, (2) by January 1, 1995, for existing Phase II units, and (3) upon commencement of operation for new units.[93]

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84. *See* 56 Fed. Reg. 63,002, at 63,042, 63,266 (1991).
85. *Id.* at 63,267-69.
86. *Id.* at 63,043.
87. *Id.* at 63,271.
88. *Id.* at 63,043; *See also* proposed part 77 at 63,336.
89. *Id.* at 63049.
90. *Id.* at 63,054.
91. *Id.* at 63,291.
92. 42 U.S.C.A. § 7651k (West Supp. 1991); *See also* 56 Fed. Reg. 63,002 at 63,061 (1991).
93. 56 Fed. Reg. 63,002 at 63,061 (1991).

Subpart B of the EPA's proposed part 75 rules prescribe the standards for continuous monitoring of SO_2, volumetric flow, NO_x, CO_2 and opacity.[94] The proposed standards also prescribe "quality assurance procedures" to be used to operate, calibrate and maintain the CEMS equipment, and "missing data procedures" to be used when the CEMS equipment fails. In addition, proposed section 75.21 would allow the owner or operator of an affected unit to apply to the EPA for an alternative monitoring system or component by demonstrating that the alternative system "has the same or better precision, reliability, accessibility, and timeliness as that provided by the continuous emission monitoring system."[95]

The CEMS rule has been controversial. Utilities contend that the rule imposes monitoring standards that cannot reliably and consistently be met by existing technology, while environmentalists have favored the rule's technology-forcing aspect.

II. OTHER CLEAN AIR DEVELOPMENTS: WEPCO UPDATE

A. Background

In January 1990, the Seventh Circuit issued a decision in *Wisconsin Electric Power Co. v. Reilly* (*WEPCO*)[96] affirming an EPA determination that proposed renovations to Wisconsin Electric Power Company's Port Washington Electric Power Plan fell within the definition of "modification" of the Clean Air Act Amendments of 1977.[97] The court agreed with the EPA that the Port Washington Project was a "physical change" rather than a "routine repair, maintenance, or replacement project" and thus exempt from new source review.[98] Such determination would subject the plant to the "new source performance standards" (NSPS)[99] and, if the modification would result in increased emissions, to "prevention of significant deterioration" standards (PSD)[100] of the Clean Air Act.[101] However, the court questioned the basis for the EPA's determination that the modification would result in increased emissions necessary to invoke PSD requirements.[102] Accordingly, the court set aside the EPA's determination that PSD requirements applied, and directed the EPA to reconsider in light of the court's interpretation of the correct method for comparing the emissions "before" and "after" modification.[103]

The *WEPCO* decision heightened industry concerns that the EPA's definition of "modification" and calculation of "before" and "after" emissions would result in the application of new source review to repair and maintenance projects routinely performed by power, industrial, and manufacturing

94. *Id.* at 63,296.
95. *Id.*
96. Wisconsin Elec. Power Co. v. Reilly, 893 F.2d 901 (7th Cir. 1990).
97. 42 U.S.C.A. § 7411(a)(4) (1983).
98. 893 F.2d at 907.
99. 42 U.S.C.A. § 7411(a) (1983).
100. Clean Air Act, Part C, 42 U.S.C.A. § 7470-7492 (West Supp. 1991).
101. 42 U.S.C.A. § 7401-7671q (West Supp. 1983 & 1991).
102. 893 F.2d at 916.
103. *Id.* at 917-18.

plants. In addition, the decision raised concerns that utilities implementing pollution control technologies in compliance with the newly passed Clean Air Act Amendments of 1990[104] risk application by the EPA of NSPS and PSD standards.

B. WEPCO Rulemaking

On June 14, 1991, the EPA issued a proposed rulemaking which purports to clarify new source review regulations.[105] Essentially, the proposed rule would:

> (1) adopt a broad new source review exclusion for utility pollution control projects;
> (2) adopt an "actual to future actual" methodology for determining whether other nonroutine modifications are subject to new source review under PSD or nonattainment provisions; and
> (3) provide that a utility may use the highest hourly emissions rate achievable at any time during the 5 years prior to the physical or operational change for its pre-change baseline.

The comment period ended on August 19, 1991, however, because of strenuous objection by environmentalists it was reopened until December 10, 1991. The EPA is currently working on the final rule which is tentatively scheduled to be released this spring.

C. The Clean Air Act Amendments of 1990

Although failing to provide the sought after "WEPCO fix," the Clean Air Act Amendments of 1990 include several sections which exempt certain modifications from new source review. Under section 409 of the Clean Air Act Amendments of 1990, repowered units would not be subject to NSPS provided they do not increase "actual hourly emissions" for regulated pollutants.[106]

Section 415 would exempt temporary clean coal technology projects, which are operated for five years or less, from NSPS and PSD requirements upon construction or dismantling of the project.[107] Permanent clean coal technology projects whose potential emissions would not increase following "repowering" would also be exempt from NSPS and PSD requirements.[108]

However, the impact of these two sections will depend upon the EPA's implementing regulations. The EPA is now drafting the proposed rule which is scheduled to be released in April 1992. The final rule is scheduled to be published in 1993.

D. The National Energy Security Act of 1992

On February 19, 1992, the Senate approved the National Energy Security Act by a vote of 94-4.[109] Although the original bill[110] included a "WEPCO"

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104. Pub. L. No. 101-549, 104 Stat. 2399-2712 (1990).
105. 56 Fed. Reg. 27,630 (1991) (to be codified at 40 C.F.R. Parts 51, 52, and 60).
106. 42 U.S.C.A. § 7651g (West Supp. 1991).
107. 42 U.S.C.A. § 7651n (West Supp. 1991).
108. *Id.*
109. National Energy Security Act, S. 2166, 102d Cong., 2d Sess. (1992).

provision which would have dealt with new source performance standards and exceptions to the Clean Air Act Amendments, the provision, together with the controversial Artic National Wildlife Refuge (ANWR) and Corporate Average Fleet Economy (CAFE) titles, was deleted when the bill was reintroduced in January 1992.[111] The House of Representatives will consider national energy legislation this spring, and a "WEPCO fix" may be reconsidered.

III. RCRA REAUTHORIZATION AND OIL AND GAS EXPLORATION AND PRODUCTION WASTES

Amendments passed by Congress in 1980[112] to the Resource Conservation and Recovery Act (RCRA)[113] require the EPA to study oil and gas exploration and production (E & P) wastes[114] and decide whether to regulate them as hazardous wastes under Subtitle C of RCRA[115] or conclude that such regulation is not appropriate. Any hazardous waste regulation of E & P wastes must be authorized by Congress. The EPA published a regulatory determination in 1988[116] that hazardous waste management of oil field wastes was not warranted.

In the second session of the 102nd Congress, E & P wastes are again the focus of legislative deliberations, this time in the context of RCRA reauthorization. Depending on the outcome of this effort, new and costly waste management requirements could be imposed with regard to onshore[117] oil and gas production.

A. Background

Section 3001(b)(2)(A) of the Solid Waste Disposal Act of 1980[118] prohibits hazardous waste regulation of drilling fluids, produced waters and other wastes that are associated with oil and gas exploration, development and production. The prohibition applies until the EPA completes a comprehensive study of potential adverse effects on human health and the environment, as

110. S. 341, 102d Cong., 1st Sess. (1991).

111. Reintroduced as S. 2166, 102d Cong., 2d Sess. (January 29, 1992).

112. Resource Recovery and Conservation Act of 1976, Pub. L. No. 94-580, 90 Stat. 2795, (codified at 42 U.S.C. §§ 6901-6987.)

113. The Solid Waste Disposal Act Amendments of 1980, Pub. L. No. 96-482, 94 Stat. 2334.

114. Oil field wastes generally include drilling fluids, produced waters, muds and cuttings, rigwash and other wastes associated (referred to as "associated wastes") with exploration, development and production of oil and gas (*e.g.*, well completion, treatment and stimulation fluids; workover wastes; tank bottoms). 53 Fed. Reg. 25,446, at 25,453-54 (1988). Drilling wastes and produced waters are sometimes characterized as "large-volume" wastes.

115. Generally, "hazardous wastes" regulated under RCRA Subtitle C are characterized as such because they exhibit a hazardous "characteristic" (*e.g.*, ignitability, corrosivity, reactivity or EP-toxicity). Also, hazardous wastes can be "listed" because they exhibit a hazardous characteristic and have other properties that may render them more harmful than other wastes. Nonhazardous wastes are regulated under Subtitle D of RCRA.

116. Regulatory Determination for Oil and Gas and Geothermal Exploration, Development, and Production Wastes, 53 Fed. Reg. 25,446 (1988).

117. The scope of the exemption of RCRA § 3001(b)(2)(A), discussed *infra*, included drilling fluids and cuttings from offshore operations disposed of onshore. *Id.* at 25,453.

118. 42 U.S.C.A. § 6921 (West 1983).

well as the means currently used to manage them.[119] Produced waters, the largest volume oil field waste, are regulated under the Safe Drinking Water Act's Underground Injection Control (UIC) Program[120] and the National Pollutant Discharge Elimination System (NPDES)[121] of the Clean Water Act. Drilling fluids and other wastes associated with oil and gas exploration and production are regulated pursuant to state solid waste programs.

Section 3001(b)(2)(B) requires the EPA to decide whether hazardous waste regulation of E & P wastes under RCRA subtitle C is inappropriate. The EPA determined in June 1988 that subtitle C regulation was not warranted and announced that it would implement a three-step approach to address issues posed by E & P wastes. The EPA would: (1) improve federal programs existing under subtitle D of RCRA, the Clean Water Act, and the Safe Drinking Water Act; (2) work with states to encourage modification of their regulations and enforcement to improve their programs; and (3) work with Congress to develop any additional statutory authorities that may be required.[122]

In deciding that the better approach was under subtitle D, the EPA concluded that existing federal and state regulations adequately protect human health and the environment from oil and gas wastes.[123] While some "gaps" exist in state programs concerning large-volume wastes, the EPA found that most state regulations contained specific requirements for the handling of drilling muds and produced waters. Regulatory gaps in the NPDES and UIC programs could be and were in fact being addressed by the EPA.

The EPA also recognized that regulation of E & P wastes as hazardous wastes would have a significant impact on energy production and the U.S. economy. The EPA estimated that imposition of Subtitle C requirements "on 10 to 70% of the large-volume drilling waste and non-EOR [enhanced oil recovery] produced water would cost the industry and consumers $1 billion to $6.7 billion per year in compliance costs (not including costs for land ban or corrective action regulations mandated by Congress)."[124]

The agency also predicted that the costs to industry of managing associated wastes[125] under subtitle C would be between $200 million to $550 million per year.[126] It was estimated that subtitle C regulation would reduce domestic oil and gas production "by as much as twelve percent."[127] Further, EPA cal-

119. RCRA § 8002(m) directs that the study include an analysis of: the sources and volumes of oil field wastes; current disposal practices; potential risk from surface runoff or leachate; documented damage cases; and alternative disposal methods, the costs thereof, and the impacts of those alternatives on energy production.

120. Safe Drinking Water Act, 42 U.S.C.A. §§ 300h-300h-7 (1991).

121. 42 U.S.C.A. § 1342 (1991).

122. Regulatory Determination for Oil and Gas and Geothermal Exploration, Development and Production Wastes, 53 Fed. Reg. 25,446, at 25,447 (1988).

123. In evaluating the risks to human health and the environment, the EPA considered the rate of release of contaminants from different management practices, the fate and transport of these contaminants in the environment, and the potential for health or ecological exposure to the contaminants. *Id.* at 25,455.

124. *Id.*

125. Described in n.114, *supra*.

126. 53 Fed. Reg. 25,446, at 25,455 (1988).

127. *Id.*

culated that net impacts on the per barrel price of crude oil would range up to $0.76, that costs to consumers would be $4.5 billion per year, and that the deficit in the U.S. balance of payments would increase by as much as $11 billion.[128]

In light of these findings, the EPA concluded that "Subtitle C does not provide sufficient flexibility to consider costs and avoid the serious economic impacts that regulation would create for the industry's exploration and production operations."[129]

Following publication of the regulatory determination, the EPA began a two-year effort in conjunction with the Interstate Oil and Gas Compact Commission (IOGCC)[130] to develop a report[131] on the elements necessary for an effective state regulatory program. The IOGCC formed a Council on Regulatory Needs to assist the EPA in implementing this strategy. That effort concluded in December 1990 with the publication of a survey of state regulatory programs and a set of comprehensive recommendations for improving the management of E & P wastes. Participating in the effort were state oil and gas agencies, industry, environmental groups, state environmental agencies, and federal agencies.

Since its completion, the IOGCC study has been used as a model against which state regulatory programs have been "peer reviewed" to determine effectiveness in addressing E & P wastes. Thus far, the Wyoming and Pennsylvania programs have been scrutinized. Self-initiated examinations have been undertaken in Montana, New Mexico, and Louisiana.

B. Congressional Action

The House and Senate committees with jurisdiction over energy matters held hearings on RCRA in 1991, and their respective chairmen indicated that passage of reauthorization legislation will receive high priority in 1992. Sen. Max Baucus (D-MT), chairman of the Subcommittee on Environmental Protection, introduced S. 976,[132] a comprehensive RCRA reauthorization bill. While the bill has no specific provisions relating to E & P waste regulation, it was analyzed by an industry consulting firm[133] to determine how oil field operations would be affected if the Subtitle D requirements in the bill for industrial wastes were applied to E & P wastes.[134] The results are profound:

(a) Production from eight out of every ten wells that were producing at the

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128. *Id.* at 25,450.

129. *Id.* at 25,447.

130. Formerly the Interstate Oil Compact Commission. The IOGCC is the organization of the governors of the 29 oil and gas producing states.

131. *EPA/IOCC Study of State Regulation of Oil and Gas Exploration and Production Waste*, Interstate Oil Compact Commission (1990).

132. S. 976, 102d Cong., 1st Sess. (1991).

133. *Estimates of RCRA Reauthorization Economic Impacts on the Petroleum Extraction Industry*, Gruy Engineering Corporation (1991).

134. S. 976 sets specific minimum requirements for facilities subject to them. For purposes of the study, it was assumed that the provisions of S. 976 setting minimum standards for surface impoundments and those requiring that treatment, storage, or disposal facilities obtain permits and conduct corrective action assessments as part of that process would be applicable to E & P wastes. *Id.* at 1.

> beginning of 1990 would stop. Three out of every four gas wells would be shut in.
> (b) Fourteen states would lose more than 97 per-cent of their oil wells—seven states would lose 100 percent.
> (c) Oil production in the first year would drop by 20 percent (about 440 million barrels). Gas production would decrease 2,000 billion cubic feet (13 percent) in the first year.
> (d) 2.5 billion barrels of recoverable oil reserves and 10.2 trillion cubic feet of recoverable gas reserves would be lost permanently.
> (e) The number of jobs lost in the E & P industry would total more than 40,000. Jobs lost in all sectors of the economy would exceed 145,000.[135]

Industry and the EPA testified that a new federal regulatory program addressing E & P wastes was unnecessary in light of the actions undertaken by the EPA, and the IOGCC, the states and industry to improve existing programs for the management of oil and gas wastes.[136]

There is currently no language pertaining to E & P wastes in the House RCRA legislation. However, Transportation and Hazardous Materials Subcommittee Chairman Al Swift (D-WA) stated during hearings last year that a "no action" approach (i.e., maintaining the status quo) to E & P wastes would not be acceptable to the members of the full House. In addition, there were indications that at least one subcommittee member would attempt to legislate management requirements for associated wastes. As noted *supra*, the costs of managing associated wastes would be substantial.

C. Conclusion

While it is too early to predict the outcome of RCRA reauthorization, or even whether in fact it will occur in 1992, the potential exists for legislation that would cover at least some oil field wastes under RCRA Subtitle C or more stringent subtitle D regulations. Should those wastes even be covered by the non-hazardous industrial waste provisions of subtitle D, as currently set forth in S. 976, industry has expressed concern that the economic impacts and effects on oil and gas production could be severe.

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135. *Id.*

136. *See Hearing on Two Categories of RCRA Special Waste: Oil and Gas Exploration and Production Waste, and Mining and Mineral Processing Waste: Hearings on Resource Conservation & Recovery Act Reauthorization, Part 1, Before the Subcomm. on Transportation and Hazardous Materials of the House Comm. on Energy and Commerce*, 102d Cong., 1st Sess. (1991) (statements of Don Clay, Assistant Administrator for Solid Waste and Emergency Response, EPA; Robert Krueger, Commissioner, Texas Railroad Commission, on behalf of the IOGCC; Larry Bell, Vice President, ARCO Oil and Gas Company, on behalf of the American Petroleum Institute and Mid-Continent Oil and Gas Association; Denise Bode, President, Independent Petroleum Association of America).

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