UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF ALASKA

UNITED STATES OF AMERICA, Plaintiff, v. NANCY OLIVER and JAMES OLIVER d/b/a/ SAFETY WASTE INCINERATION, Defendants.	)	Case No. 3:06-cv-196 JWS **FINDINGS OF FACT AND CONCLUSIONS OF LAW, IMPOSITION OF CIVIL PENALTY, AND ISSUANCE OF PERMANENT INJUNCTION**

I. INTRODUCTION

This case was tried to the court from March 23, 2009, through March 27, 2009. This document sets forth the court's findings of fact and conclusions of law pursuant to Federal Rule of Civil Procedure 52. In this document, the court will refer to the defendants as "the Olivers." This document sets out an order for payment of a civil penalty by the Olivers and issues a permanent injunction against certain activities by the Olivers.

A. The Olivers' Established Violations

In a motion for partial summary judgment on liability at docket 29, the United States asked the court to find the Olivers liable for violating the Clean Air Act and associated regulations on 7,336 occasions, alleging the following violations types:

(1) Failure to Petition EPA for Site-Specific Operating Parameters, in violation of 40 C.F.R. § 62.14453(b).

(2) Failure to Install Required Emissions Monitoring Devices, in violation of 40 C.F.R. § 62.14454(c).

(3) Failure to Conduct and Report Results of Initial Performance Test, in violation of 40 C.F.R. § 62.14451(b)(2).

(4) Failure to Submit a Satisfactory Waste Management Plan, in violation of 40 C.F.R. § 62.14431.

(5) Failure to File Various Operating Reports, in violation of 40 C.F.R. §§ 62.14463, 62.14464, & 62.14465.

Concluding that the Olivers did not qualify for the co-fired combustor exemption because it was improper to include the weight of air mixed with natural gas in the co-fired combustor calculations and further that the United States was not estopped from enforcing the violations alleged, in the Order and Opinion at docket 47 the court held the Olivers liable for the violations alleged in the United States' motion for summary judgment. These violations took place during the period from October 17, 2002, through August 1, 2007.

B. Relief Requested by United States

The United States asks the court to issue a permanent injunction prohibiting the Olivers from receiving, incinerating or otherwise managing hospital/medical/infectious waste, unless they first demonstrate to EPA and the court that they are in compliance with the Federal Plan Requirements. The United States also asks this court to impose a civil penalty of $445,000 for the Olivers' violations of the Federal Plan Requirements.

II. FINDINGS OF FACT

A. Federal Plan Requirements

1. Pursuant to Sections 111 and 129 of the Clean Air Act, 42 U.S.C. §§ 7411 & 7429, on July 6, 1999, EPA proposed the Federal Plan Requirements for Hospital/Medical/Infectious Waste Incinerators Constructed On or Before June 20, 1996 ("Federal Plan Requirements"). 64 Fed. Reg. 36426 (July 6, 1999).

2. EPA promulgated the Federal Plan Requirements on August 15, 2000. 65 Fed. Reg. 49868 (Aug. 15, 2000). They appear at 40 C.F.R. Part 62, Subpart HHH.

3. The Federal Plan Requirements apply to owners and operators of hospital/medical/infectious waste incinerators ("HMIWI") constructed on or before June 20, 1996, and located in states which did not adopt a state plan to implement EPA's standards of performance for HMIWI. 40 C.F.R. § 62.14400; 65 Fed. Reg. 49868, 49870, 49874 (Aug. 15, 2000).

4. The State of Alaska did not adopt a plan to implement EPA's standards of performance for HMIWI.

5. EPA determined that HMIWI released a wide array of pollutants into the air, including dioxins, and heavy metals such as lead, cadmium, and mercury. EPA specifically found that HMIWI were the largest known source of dioxin/furan and mercury emissions to the air. 60 Fed. Reg. 10654, 10656 (Feb. 27, 1995).

6. EPA determined that dioxin exposure can result in a number of cancer and noncancer health effects in humans. 60 Fed. Reg. 10654, 10656 (Feb. 27, 1995).

7. EPA determined that emissions from HMIWI contain organics (dioxins/furans), particulate matter, cadmium, lead, mercury, hydrogen chloride, sulfur dioxide, and nitrogen dioxide, and that these pollutants can have adverse effects on both public health and welfare. 62 Fed. Reg. 48350 (Sept. 15, 1997).

8. EPA determined that its proposed emission limits, which were later incorporated into the Federal Plan Requirements, would reduce nationwide HMIWI emissions of dioxins/furans and lead by 99 percent, reduce nationwide HMIWI emissions of particulate matter, carbon monoxide, and hydrogen chloride by 98 percent, reduce nationwide HMIWI emissions of cadmium by 94 percent, and reduce nationwide HMIWI emissions of mercury by 94 percent. 60 Fed. Reg. 10654, 10656 (Feb. 27, 1995).

9. EPA determined that the typical uncontrolled emissions from existing intermittent-type HMIWI are as follows:

Pollutant	Concentration
Particulate Matter	570 mg/dscm
Carbon Monoxide	690 ppmv
Dioxins/Furans	25,000 ng/dscm
Hydrogen Chloride	1,400 ppmv

Sulfur Dioxide	16 ppmv
Nitrogen Oxide	140 ppmv
Lead	4.2 mg/dscm
Cadmium	0.29 mg/dscm
Mercury	3.1 mg/dscm

60 Fed. Reg. 10654, 10671, Table 11b (Feb. 27, 1995).

10. The emissions limits established in the Federal Plan Requirements are set forth at 40 C.F.R. Part 62, Subpart HHH, Table 1, and are as follows for small-sized incinerators:

Particulate Matter	115 mg/dscm
Carbon Monoxide	40 ppmv
Dioxins/Furans	125 ng/dscm
Hydrogen Chloride	100 ppmv
Sulfur Dioxide	55 ppmv
Nitrogen Oxide	250 ppmv
Lead	1.2 mg/dscm
Cadmium	0.16 mg/dscm
Mercury	0.55 mg/dscm

11. EPA determined, that emissions of particulate matter, carbon monoxide, and dioxins/furans from HMIWI can be reduced by an incinerator's retention time. 60 Fed. Reg. 10654, 10671 (Feb. 27, 1995).

12. EPA determined that emissions of hydrogen chloride, sulfur dioxide, nitrogen oxide, lead, cadmium, and mercury could not be reduced by an incinerator's retention time. 60 Fed. Reg. 10654, 10671-10672 (Feb. 27, 1995).

13. EPA determined that emissions of hydrogen chloride, sulfur dioxide, nitrogen oxide, lead, cadmium, and mercury from HMIWI can only be controlled by the installation of an air pollution control device. 62 Fed. Reg. 48348, 48371 (Sept. 15, 1997).

14. The initial date for compliance set forth in the Federal Plan Requirements was August 15, 2001. 40 C.F.R. §§ 62.14470(a), 62.14471(a), & 62.14472(a).

15. The Federal Plan Requirements authorized EPA to grant extensions of time until September 15, 2002, to come into compliance if the facility met certain specified increments of progress. 40 C.F.R. §§ 62.14470(b), 62.14471(b), & 62.14472(b).

16. The Federal Plan Requirements include several exemptions, two of which have some relevance to this litigation. One is an exemption available to a combustor "during periods when only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste (all defined in § 60.51c) is burned, provided the owner or operator of the combustor [gives EPA notice of an exemption claim and] keeps records on a calendar quarter basis of the periods of time when only [such] waste is burned." 40 C.F.R. § 60.32e (b).

17. The second exemption is at 40 C.F.R. § 60.32e (c). It is available for a "co-fired combustor" defined at 40 C.F.R. § 60.51(c) to be an incinerator that combusts hospital/medical/infectious wastes together with other wastes, provided that no more than ten percent (10%) by weight of the total material and fuel combusted is hospital/medical/infectious waste. To qualify for this exemption the owner or operator must give EPA notice and "keep records on a calendar quarter basis of the weight of hospital waste and medical/infectious waste combusted, and the weight of all other fuels and wastes combusted at the co-fired combustor." 40 C.F.R. § 60.32e (c).

B. <u>The Olivers' Operation</u>

18. Defendants Nancy Oliver and James Oliver, d/b/a Safety Waste Incineration ("the Olivers"), own and operate an HMIWI near Mile 11 on the Knik-Goosebay Road in Knik, Alaska. The Olivers are the only people who work in the business. The business has little capital, and the Olivers' loan applications for funds to be used in their business have been consistently rejected by several lenders. The Olivers and their child live on the property where the incinerator is located and have been constructing a house there.

19. The Olivers' HMIWI is a Consumat C75P2 incinerator. It is a two-chamber, controlled-air type, intermittent incinerator with a two-second retention time.

20. In 1994, the Olivers' purchased the property where they live and operate the incinerator. At that time, the incinerator was already located on the property, and so obviously had been constructed prior to June 20, 1996.

21. The Olivers' use their incinerator to burn hospital/medical/infectious waste and other materials.

C. The Olivers' Efforts to Comply With Regulatory Requirements

22. In November of 1999, Nancy Oliver called John Pavitt, an inspector in EPA's Anchorage Operations Office, to inquire about methods of compliance with the proposed Federal Plan Requirements. Ms. Oliver mentioned that she had previously spoken to officials at EPA Headquarters about the proposed regulations.

23. From November of 1999 through October of 2001, Mr. Pavitt received several calls from Ms. Oliver about the proposed regulations. Mr. Pavitt answered questions Ms. Oliver asked or referred her to others at EPA for answers.

24. In connection with their effort to comply with the Federal Plan Requirements, the Olivers submitted a Title V Permit application to the Alaska Department of Environment Conservation ("ADEC") on September 15, 2000.

25. On November 6, 2000, the Olivers asked EPA for an extension of the August 15, 2001 compliance deadline.

26. On January 10, 2001, and on April 16, 2001, the Olivers submitted additional information to EPA in support of their request.

27. The materials submitted indicated that the Olivers were pursuing the purchase and installation of an alterative waste treatment technology that would eliminate the need to incinerate the wastes they collected.

28. The Olivers identified a plasma-enhanced melter and a reverse-polymerization system as the alternative waste treatment technologies being considered, and indicated that the estimated cost would be $1.5 million.

29. The April 16, 2001 memorandum recognized that the alternative treatment technologies being considered lacked an established record of performance.

30. In its rule-making, EPA identified autoclaves as an alternative treatment technology to achieve compliance with the Federal Plan Requirements. The cost of an autoclave would have been approximately $250,000.

31. The Olivers' written submissions did not identify any incremental steps to be attained in progress to compliance ("milestones") as required by the Federal Plan Requirements.

32. On May 3, 2001, EPA granted the Olivers a compliance extension conditioned on meeting two milestones which the Olivers proposed in a telephone conversation with EPA on May 1, 2001.

33. The first milestone required the Olivers to provide written confirmation by July 31, 2001, that they had entered a contract for installation of an alternative waste treatment technology.

34. On July 14, 2001, the Olivers requested EPA to allow an extension until May 31, 2002, to comply with the first milestone.

35. On August 23, 2001, EPA granted the Olivers an extension, but only until September 23, 2001, to meet the first milestone. EPA did not modify the second milestone.

36. On September 21, 2001, the Olivers sent EPA a copy of a purported contract for the purchase of an incinerator with an air pollution control device.

37. The purported contract failed to identify the equipment purchased and did not give a price for whatever equipment might have been involved.

38. In a letter dated October 1, 2001, EPA terminated the conditional compliance extension on the ground that the Olivers had failed to enter into the required binding contract by September 21, 2002. EPA gave the Olivers three days in which to cease combusting hospital/medical/infectious wastes.

39. The Olivers temporarily ceased combustion of hospital/medical/infectious waste on October 8, 2001, three days after receiving EPA's October 1, 2002 letter.

40. In correspondence dated October 11, 2001, and October 12, 2001, the Olivers asked for reconsideration of EPA's decision to terminate the conditional compliance extension.

41. Responding in a letter dated November 8, 2001, the Regional Administrator of Region 10 reiterated EPA's decision to terminate the conditional extension. The letter identified five ways the Olivers could comply with the Federal Plan Requirements.

42. Ms. Oliver advised EPA inspector Pavitt that, in light of EPA's revocation of the Olivers' compliance extension, the Olivers would continue to collect hospital/medical/infectious wastes but would not incinerate the wastes. Concerned

about an accumulation of untreated wastes and after consulting with state and local officials, Mr. Pavitt inspected the Olivers' facility on November 13, 2001.

43. During his inspection, Mr. Pavitt observed that a caution placard on the incinerator was encrusted with hardened soot, suggesting to him uncontrolled fugitive emissions from the incinerator. Mr. Pavitt also observed that the incinerator did not have a pollution control device or a continuous emissions monitor.

44. On November 16, 2001, the Olivers provided EPA with a contract, dated November 1, 2001, between their business and Therm Tec, Inc. ("Therm Tec"), for purchase of an industrial incinerator with a wet-gas scrubber.

45. The contract recited a $10,000 down payment by the purchaser, and provided that Therm-Tec would begin construction of the incinerator upon payment of 35% of the $968,375 purchase price.

46. On December 5, 2001, EPA granted a second compliance extension, on the condition that the 35% payment under the Therm-Tec contract be made by April 1, 2002.

47. On March 26, 2002, the Olivers requested additional time to make the 35% payment, on the ground that a proposed state rule allowing disposal of untreated medical waste would, if enacted, eliminate the market for hospital/medical/infectious waste incineration.

48. Responding on April 1, 2002, EPA waived the milestones in the second compliance extension, but retained the compliance deadline of September 15, 2002, set forth in the Federal Plan Requirements.

49. The Olivers sought but were unable to obtain financing to perform the contract with Therm-Tec.

50. The Olivers were also considering the possible use of the exemption provided in 40 C.F.R. § 60.32e (b). On August 26, 2002, the Olivers asked EPA for guidance on this exemption. However, it does not appear that the Olivers ever gave notice of reliance on this exemption as required by the regulation.

51. On September 9, 2002, Ms. Oliver advised EPA that the Olivers would shut down their incinerator by September 15, 2002, and restart at a later date. Ms. Oliver

also asked EPA for guidance on whether and how the Olivers might operate using the co-fired combustor exemption of the Federal Plan Requirements.

52. Three days later on September 12, 2002, EPA responded by explaining the requirements of the co-fired combustor exemption to the Federal Plan Requirements.

53. On September 13, 2002, Ms. Oliver transmitted a memo by fax to EPA advising that the Olivers would shut down their incinerator by September 15, 2002, and restart after that date in accordance with the requirements for those who shut down after August 15, 2002, and restart after September 15, 2002, set out at 40 C.F.R. § 62.14472 (c).

54. Ms. Oliver's September 13, 2002 faxed memo stated that the Olivers were "in the construction phase of installing an air pollution control device" on the incinerator. The notice added that "during the construction period, [the Olivers have] added a cold storage unit for receiving medical waste and would be subcontracting with B&P Services in Fairbanks, Alaska for medical waste sterilization and disposal."

55. On September 15, 2002, the Olivers temporarily ceased combustion of hospital/medical/infectious wastes.

56. On October 9, 2002, EPA inspector Pavitt conducted his second inspection of the Olivers' facility. The purposes of the inspection were to confirm that the incinerator had been shut down, to investigate the cold storage of medical wastes, and to see if improvements had been made to the incinerator. Mr. Pavitt prepared a report concerning this inspection which is dated January 8, 2003.

57. During his inspection, Mr. Pavitt observed that the incinerator still lacked a pollution control device and continuous emissions monitoring equipment. The only difference Mr. Pavitt noticed in the incinerator and its surroundings was a nearby shallow excavation. Mr. Oliver told Mr. Pavitt that the excavation was for installation of an air-pollution control device. Other than the excavation, Mr. Pavitt saw no evidence of progress toward installation of an air pollution control device.

58. Mr. Pavitt observed a tractor-trailer with a refrigeration unit that was not operating. On the date of the inspection the air temperature was sufficiently cool that it would have been unnecessary to use the refrigeration unit to keep the contents chilled.

59. During the inspection, the Olivers told Mr. Pavitt they intended to ship the bulk of medical waste received to B & P Services in Fairbanks, thereby allowing them to operate as a co-fired combustor by burning a reduced amount of medical waste. Mr. Pavitt did not give the Olivers any advice on how they might use the co-fired combustor exemption as an alternative.

60. On October 17, 2002, the Olivers notified EPA that they intended to operate under the co-fired combustor exemption to the Federal Plan Requirements, and provided the following estimates of the relative weights of hospital/medical/infectious wastes and other wastes to be combusted at their facility:

Type of Waste	Pounds per Year	Percent by Weight
Commercial, Industrial and Solid Waste	78,831 lbs/year	56.3%
Municipal Solid Waste (personal trash)	6,000	4.3%
Pathological, chemotherapeutic, & Low-level Radioactive Waste	18,368	13.1%
< 10% of total combusted wt - exempted HMIW (combusted)	11,467	8.2%
> 10% of total combusted wt - regulated HMIW (non-combusted)	25,269	18.1%
Total	139,935	100%

61. In the October 17, 2002 memorandum, the Olivers claimed that only 8.2% by weight of their “co-fired combustor waste stream” would be comprised of hospital and medical/infectious waste, while indicating that 41.1% by weight of the waste they received was hospital/medical/infectious waste. The 8.2% figure rested on two assumptions: First, a full 1/3 of the hospital/medical/infectious waste was pathological, chemotherapeutic, and low-level radioactive waste excluded from consideration for purposes of the co-fired combustor exemption. Second, nearly 46% of the hospital/medical/infectious waste received would not be combusted.

62. The Olivers gave no basis for the assumption that 1/3 of their hospital/medical/infectious waste was pathological, chemotherapeutic, or low-level radioactive waste.

63. EPA's rule-making process had found that pathological, chemotherapeutic, and low-level radioactive wastes typically constitute less than 3% of hospital/medical/infectious waste.

64. The Olivers' October 17, 2002 communication also stated they had been told by EPA that the "enforceable requirement" portion of the qualification for a co-fired combustor exemption could be met through a modified state air permit and that the Olivers had applied for a revised state air permit. The Olivers did complete a Title V Operating Permit Application Revision dated October 17, 2002.

65. The October 13, 2002 memo also stated that the Olivers had made "a significant investment in time and money toward adding an [air pollution control device] to their existing [incinerator]."

66. In January and April of 2003, Mr. Pavitt learned through conversations with representatives of B & P Services in Fairbanks that the Olivers had not sent any medical waste to B & P.

67. On October 8, 2003, EPA inspectors John Pavitt, Joe Roberto, and Keven McDermott conducted a third inspection of the Olivers' property. The purposes of the inspection were to determine whether there was compliance with the Federal Plan Requirements and verify the claim to the co-fired combustor exemption.

68. In connection with his investigation of the situation, Mr. Pavitt gathered information from area generators of hospital/medical/infectious waste, including the Olivers' largest customers. The information included data regarding the types and amounts of wastes the Olivers received for incineration.

69. During the third inspection, Mr. Pavitt observed that the incinerator still lacked an air pollution control device and continuous emissions monitoring equipment. The excavated area next to the incinerator had been partially filled with gravel, but otherwise appeared unchanged.

70. Mr. Pavitt also observed waste collection boxes labeled with waste categories, such as “cultures,” “stocks,” “biological” and “sharps,” which did not match the types of waste referred to in the co-fired combustor exemption in the Federal Plan Requirements. During the inspection, the investigators also observed and photographed boxes of waste from the Olivers’ customers which did not identify the type of medical waste contained within the boxes.

71. During the inspection, the Olivers advised that 71% of the hospital/medical/infectious waste received came from two hospitals which autoclaved any such waste which was not chemotherapeutic, low-level radioactive, pathological waste or “sharps.” Sharps are included in the definition of medical/infectious waste found at 40 C.F.R. § 60.51c. Sharps are not included in the definition of chemotherapeutic waste, low-level radioactive waste or pathological waste set out in the same regulation. It appears possible, however, that if exposed to certain chemical or radioactive materials, sharp objects would occasionally need to be included among chemotherapeutic waste or low-level radioactive waste.

72. During the inspection, Mr. Oliver told Mr. Pavitt that he relied on Mrs. Oliver to tell him what type of medical waste the boxes from their customers contained, and that he also tried to determine the contents of the boxes by picking them up to judge their weight.

73. The Olivers also advised that because they were not present when their customers filled their boxes of waste it was problematic to determine what exactly was in them.

74. EPA had determined that the identification of what was in the waste boxes provided to the Olivers’ competitor, Entech, was a matter of concern.

75. Mr. Oliver maintained a log of the types and amounts of wastes SWI had burned since January 1, 2003. Mr. Oliver denied Mr. Pavitt’s request to copy the log, saying he was not sure the numbers would add up, and he was unsure the numbers would be consistent with what had been reported to EPA. He also said he thought there was proprietary information in the logs and that they might be contaminated by exposure to infectious wastes.

76. The Olivers had no reliable basis for measuring the amounts and types of wastes received.

77. Responding to an EPA information request, on February 5, 2004, the Olivers provided records describing the types and amounts of wastes and fuels combusted from October 17, 2002, through November 15, 2003. The records provided revealed that approximately 70% percent of the waste combusted had been hospital/medical/infectious waste. The records also showed that the Olivers had combusted all such wastes received from their customers during this time period, and had not sent any hospital/medical/infectious wastes off-site for treatment and disposal.

78. In the records submitted on February 5, 2004, the Olivers claimed that non-exempt hospital/medical/infectious waste made up less than 10% of the fuel feed stream by asserting that approximately 90% of such wastes were exempt from the definition of hospital/medical/infectious waste under the co-fired combustor exemption. The Olivers asserted that 65% of the hospital/medical/infectious wastes were exempt pathological wastes, 9.72% were exempt chemotherapeutic and low-level radioactive wastes, and 15% were exempt "non-combustible" wastes.

79. There is no provision in the Federal Plan Requirements for excluding "non-combustible wastes," and the term "non-combustible wastes" is not found in the regulations.

80. On March 23, 2004, the Olivers submitted a revision to the February 5, 2004 submission which added an estimated weight of air mixed with natural gas prior to ignition in the incinerator.

81. Prior to the March 23, 2004 submission, the Olivers had consistently identified the "fuel" used in their incinerator as natural gas.

82. On April 5, 2004, the Olivers submitted a waste management plan.

83. In June 2004, Joe Roberto, an Environmental Engineer in EPA Region 10, prepared a report of EPA's investigation of the Olivers' facility ("EPA's 2004 Report").

84. EPA's 2004 Report concluded, based on information obtained from the Olivers' eleven largest customers, that at least 21.9% to 27.7% by weight of their

incinerator's fuel feed stream was comprised of non-exempt hospital and medical/infectious waste.

85. EPA's 2004 Report concluded that the Olivers' statement that approximately 75% of its medical waste (65% + 9.72%) was exempt pathological, chemotherapeutic, and low-level radioactive waste was incorrect, and that the Olivers' claim that the fuel feed stream of their incinerator contained less than 10% by weight of non-exempt hospital/medical/infectious waste was not correct.

86. On July 29, 2004, EPA delivered a Notice of Noncompliance under the Clean Air Act to the Olivers ("the Notice"). The Notice stated that the Olivers' incinerator did not meet the definition of a "co-fired combustor" in the Federal Plan Requirements because the Olivers combusted a fuel feed stream comprised of at least 22% to 28% non-exempt hospital and medical/infectious waste.

87. The Notice further stated that the Olivers' facility was therefore subject to the substantive requirements of the Federal Plan Requirements and that they were operating in violation of the Federal Plan Requirements.

88. It was the Olivers' position that EPA had not properly accounted for the weight of the air/natural gas mixture as stated in their March 23, 2004 revision.

89. On August 12, 2004, the Olivers informed EPA that they intended to achieve compliance with the Federal Plan Requirements through the purchase of an autoclave. They provided EPA with an invoice showing a $10,000 down payment on the purchase of an autoclave, the total cost of which was $104,950. The defendants sought but were unable to obtain the financing needed to complete the purchase.

90. On August 14, 2004, Mr. Oliver sent an e-mail to EPA asking whether "the total weight of the noncombustible feed (solid and gas)" should be included or excluded in the co-fired combustor percentage calculation.

91. On September 10, 2004, EPA notified Mr. Oliver by letter that, with respect to his question about noncombustible gases, EPA assumed he was referring to combustion air, and that combustion air is not considered in the co-fired combustor percentage calculation, because only the weight of the waste or fuel is considered.

92. In an e-mail dated September 15, 2004, Mr. Oliver asked EPA whether the weight of "noncombustible exempt wastes" and "noncombustible auxiliary fuel gas" should be included in the co-fired combustor calculation.

93. On September 17, 2004, EPA responded to the e-mail by asking what Mr. Oliver meant by "noncombustible exempt wastes" and "noncombustible auxiliary fuel gas." EPA also asked Mr. Oliver for an update on the plan to install an autoclave.

94. On September 20, 2004, the Olivers sent EPA revised co-fired combustor records for the period from October 1, 2002, to November 15, 2003, the same time period covered in the co-fired combustor records they had submitted to EPA on February 5, 2004. In these records, the Olivers no longer claimed that any of their hospital and medical/infectious waste was exempt pathological, chemotherapeutic, or low-level radioactive waste. Instead, the Olivers identified the fuel used as "auxiliary fuel gas," comprised of natural gas and air, and added the weight of the air to the weight of the fuel feed stream in the co-fired combustor calculations. This submission modified the Olivers' March 23, 2004 submission.

95. The effect of including the weight of air used to facilitate combustion in the weight of the fuel feed stream was to reduce the percentage weight of non-exempt hospital and medical/infectious waste to only 3.8% for each calendar quarter.

96. Three days later, on September 23, 2004, EPA wrote to the Olivers to explain that, in their revised co-fired combustor records of September 20, 2004, they had improperly included the weight of combustion air in the fuel feed stream. EPA explained that this was improper because combustion air is not a fuel.

97. On September 30, 2004, EPA wrote to Mr. Oliver again advising that air used in the combustion of natural gas is not a fuel regardless of when or how the air is mixed with the fuel prior to combustion. EPA advised that the term "fuel feed stream," as used in the definition of co-fired combustor in 40 C.F.R. § 62.14490, covers only materials that are either wastes or fuels, and that air mixed with natural gas to facilitate combustion is neither a waste nor a fuel.

98. On October 6, 2004, the Olivers responded to EPA asserting that it was incorrect not to include the full weight of their gaseous fuel.

99. On October 21, 2004, EPA sent the Olivers an Administrative Compliance Order ("the Compliance Order." The Compliance Order stated that, based on a number of factors, including the fact that combustion air is not a waste or fuel for purposes of the co-fired combustor exemption, the Olivers were combusting a fuel feed stream comprised of approximately 35.7% hospital or medical/infectious waste. EPA concluded that the Olivers had been in violation of the Federal Plan Requirements from at least October 1, 2002 through the date of the Compliance Order.

100. The Compliance Order required the Olivers to submit to EPA within 15 days a proposed compliance plan which would bring the facility into compliance with the Federal Plan Requirements within 90 days of the effective date of the order, and which would include revisions to waste segregation, collection, identification, weighing, and recording methods sufficient to allow the Olivers and EPA to determine whether the incinerator was being operated in compliance with the exemption in 40 C.F.R. § 62.14400(b).

101. On December 2, 2004, the Olivers sent a letter to EPA proposing to achieve compliance with the Federal Plan Requirements through the installation of an autoclave, boiler, associated equipment, and other improvements. As had been the case with all previous proposals to modify or improve their disposal process, the Olivers were unable to obtain the necessary financing.

102. On December 15, 2004, EPA notified the Olivers that their proposed compliance plan was deficient because it did not contain interim compliance milestones, specify dates for completing construction and beginning operation of an autoclave to treat medical waste, and did not demonstrate that the Olivers would be in compliance with the Federal Plan Requirements by February 16, 2005, as required by the Compliance Order.

103. EPA further stated that it would agree to an extension of the February 16, 2005, final compliance deadline set forth in EPA's Administrative Compliance Order if the Olivers proposed a definite plan for returning to compliance as soon as possible and provided more detailed information as to how they planned to dispose of medical waste after installation of an autoclave.

104. On January 4, 2005, the Olivers presented a compliance plan for the purchase and installation of an autoclave no later than October 1, 2005, the purchase of associated required equipment, and the purchase and installation of an air pollution control device at a future date.

105. The Olivers' communication to EPA also maintained their claim to qualify for the co-fired combustor exemption, based on the inclusion of the weight of combustion air in the calculation of the weight of the incinerator's fuel feed stream.

106. On February 3, 2005, EPA indicated in a conference call with the Olivers that it would consider extending the compliance date if the Olivers committed to specific dates for the purchase and installation of all necessary equipment and upgrades.

107. On February 7, 2005, the Olivers advised EPA that they could not obtain the financing needed for the purchase and installation of the necessary equipment and upgrades.

108. On July 13, 2005, EPA sent the Olivers a Request for Information under Section 114 of the Clean Air Act, 42 U.S.C. § 7414, requesting records to substantiate the Olivers' claim to be operating as a co-fired combustor for the period from October 1, 2003 through June 30, 2005.

109. On September 6, 2005, the Olivers sent EPA co-fired combustor records for the period from October 1, 2003, through June 30, 2005. The Olivers did not claim that any of their hospital/medical/infectious waste was exempt pathological, chemotherapeutic, or low-level radioactive waste. They continued to identify the fuel used as "auxiliary fuel gas" comprised of natural gas and air. By including the weight of air used to facilitate combustion in the weight of its fuel, the Olivers were able to claim that they were burning between 3.7% and 5.4% hospital/medical/ infectious waste.

110. On August 18, 2006, the Olivers submitted their co-fired combustor records for the period from October 17, 2002 through June 30, 2006.

111. On August 22, 2006, the United States commenced this action by filing a civil complaint alleging that the Olivers were operating a HMIWI in violation of the Clean Air Act and the Federal Plan Requirements.

112. On June 11, 2008, the court ruled on EPA's motion for summary judgment. In the order at docket 47, the court held that the Olivers did not qualify for the co-fired combustor exemption finding that it was improper to include the weight of the air mixed with natural gas in the calculations relating to co-fired combustor status. The court also held that the Olivers were liable for 7,336 violations of the Clean Air Act during the period from October 17, 2002, through August 1, 2007.

113. During 2008, the Olivers completed some site work in preparation for the installation of a building, boiler, and steam sterilizer.

114. On December 25, 2008, the Olivers paid $6,450 for a truck to transport steam sterilized waste to a landfill.

115. On January 14, 2009, the Olivers paid $9,500 Canadian dollars for a used boiler system.

116. On March 11, 2009, the Olivers paid $38,500 for a used steam sterilizer.

117. At the time of trial, the Olivers were still receiving and incinerating waste from several customers, including the Alaska Native Medical Center in Anchorage, the Valley Native Primary Care Center, and the State of Alaska Department of Corrections. However, they had also lost a number of customers as a result of the lawsuit and the financial drain of their attempts to comply with the Federal Plan Requirements.

D. <u>The Olivers' Economic Benefit</u>

118. In the field of economics and pollution control and environmental noncompliance, economic benefit is the measure of the extent to which a company or an individual benefits financially from its failure to comply with or fulfill in a timely manner its environmental regulatory requirements.

119. Plaintiff's expert economist, Mr. Jonathan Shefftz, performed three economic benefit calculations about which he testified in this case.

120. In his first calculation, Mr. Shefftz assumed the Olivers achieved compliance with the Federal Plan Requirements by the end of 2009 through the purchase of an autoclave and associated equipment and facilities. In this scenario, Mr. Schefftz calculated the after-tax present value of the benefit to the Olivers of delaying the expenditures associated with the installation of an autoclave from

October 17, 2002, until March 31, 2009, and determined that the economic benefit to the Olivers' of their delayed compliance with the Federal Plan Requirements was $57,000. This benefit calculation does not include the value derived from delayed operating and maintenance costs for the autoclave, and to that extent underestimates the Olivers' economic benefit. Finally, in this scenario, Mr. Shefftz assumed that SWI would pay its penalty on March 31, 2009, and would reap an economic benefit of $403 for each month of further delay.

121. In his second calculation, Mr. Shefftz assumed that the Olivers never purchased an autoclave, and never achieved compliance with the regulations. In this scenario, Mr. Schefftz calculated the after-tax present value of the benefit to the Olivers of never making the expenditures associated with the installation of an autoclave to be $295,000. In this scenario, Mr. Shefftz assumed the penalty would be paid on March 31, 2009, and determined that SWI would enjoy an economic benefit of $2000 for each month that its payment was delayed. The $295,000 calculation does not include avoided operating and maintenance costs for the autoclave and to that extent underestimates the Olivers' economic benefit.

122. Mr. Shefftz's third calculation assumed that the Olivers achieved compliance in October of 2002 by reducing the amount of hospital and medical/infectious waste they incinerated to an amount sufficient to allow them to quality for the co-fired combustor exemption to the Federal Plan Requirements. In this scenario, Mr. Shefftz determined the amounts of waste the Olivers would have to have refused, the avoided expenses and lost revenues associated with those amounts, and thus the reduction in income the Olivers would have experienced had they complied. In this scenario, Mr. Shefftz only had information to support an estimate for the period from the fourth quarter of 2002 through the second quarter of 2005. In this third scenario, Mr. Shefftz determined that the Olivers' economic benefit from the end of 2002 through mid-2005 had been $180,000. In connection with this scenario, Mr. Shefftz again assumed that SWI would pay its penalty on March 31, 2009. Using that assumption he determined that the Olivers enjoy an additional economic benefit of $1,200 for each month payment is delayed.

123. Mr. Shefftz testified that his economic benefit calculations are based on conservative inputs and assumptions and underestimate the economic benefit received by the Olivers for their violations of the Federal Plan Requirements.

124. Based on the exceedingly conservative information provided by the Olivers regarding their living expenses, the Olivers' income exceeded their expenses by approximately $75,000 in 2005 and 2006, and by approximately $131,000 in 2007 according to Mr. Shefftz. The living expenses presented by the Olivers were literally the government's poverty level for a family of three. Using a more realistic assumption about what the Olivers actually would have required to support their three-person household would reduce the estimated annual income significantly.

III. CONCLUSIONS OF LAW

A. Permanent Injunction

1. When a district court's equitable jurisdiction is invoked in a suit seeking relief based on violations of the Clean Air Act ("the Act"), Section 113(b) of the Act grants the court, "jurisdiction to restrain such violation, to require compliance, to assess such civil penalty . . . and to award any other appropriate relief." 42 U.S.C. § 9613(b).

2. Traditional equitable standards for injunctive relief require a plaintiff to show: "(1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction." *eBay Inc. V. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006).

3. These traditional equitable standards must be evaluated and applied here so as to account for several special circumstances present in this case.

4. The first special circumstance derives from the principle that when dealing with injunctions intended to enforce federal statutes courts must consider direction given by Congress in awarding injunctive relief, for it is "the exclusive province of the Congress not only to formulate legislative policies and mandate programs and projects, but also to establish their relative priority. . . . Once Congress . . . has decided the order

of priorities in a given area, it is for the Executive to administer the laws and for the courts to enforce them when enforcement is sought." *Tennessee Valley Authority v. Hill*, 437 U.S. 153, 194 (1978) (approving injunction to enforce § 7 of the Endangered Species Act). This means that when, "an injunction is authorized by statute, and the statutory conditions are satisfied . . . the agency to whom the enforcement of the right has been entrusted is not required to show irreparable injury." *United States v. Odessa Union Warehouse Co-op*, 833 F.2d 172, 175 (9th Cir. 1987). This proposition is now a well-established rule. *Burlington Northern R. Co. v. Bair*. 957 F.2d 1992 (9th Cir. 1992).

5. The second special circumstance is that, "when the United States . . . sues in its capacity as protector of the public interest, a court may rest an injunction entirely upon a determination that the activity at issue constitutes a risk of danger to the public." *Marine Shale Processors*, 81 F.3d 1329,1359 (5th Cir. 1996) (emphasis added).

6. The third circumstance arises from the fact that the harm occasioned by the Olivers' operation is a harm to the environment. "Environmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, *i.e.*, irreparable. If such injury is sufficiently likely, therefore, the balance of harms will usually favor the issuance of an injunction to protect the environment." *Amoco Production Co. v. Village of Gambell*, 480 U.S. 531, 545 (1987).

7. Section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b), expressly provides for injunctive relief to redress violations of the Act. The United States has demonstrated sufficient risk of harm to public health and the environment from the defendants' ongoing violations. EPA determined, in its rulemaking, that uncontrolled hospital and medical/infectious waste incinerators released significant quantities of dioxins, heavy metals, acid gases, and other air pollutants. EPA also found that these pollutants posed significant risks to public welfare and the environment, and that hospital/medical/infectious waste incinerators were a significant source of such emissions. Irreparable harm is established because the Olivers' continuing operation of an uncontrolled HMIWI poses a significant risk to the environment and public health.

This is sufficient to meet the requirement for irreparable injury under the traditional standards for issuance of injunctive relief.

8. The second traditional consideration–that alternatives to an injunction would be inadequate–is also met here. The Olivers have violated the Federal Plan Requirements for many years. They have continued to do so despite an EPA Notice of Noncompliance, an EPA Administrative Compliance Order, and this court's ruling that they are in violation of the law. In their effort to continue operating, the Olivers made representations to EPA about their progress in installing air pollution control devices and other equipment as well as their shipment of medical waste to Fairbanks for disposal that were not true. Even after this court ruled that the Olivers did not qualify for the co-fired combustor exemption, they forged ahead based either on their own belief that they were qualified or some other theory which they had determined was adequate to allow them to proceed in disregard of the court's decision. Under these circumstances it must be said that some of the Olivers' violations of the Federal Plan Requirements were willful. Such willful behavior adds even more support to the conclusion that any remedy other than an injunction would be inadequate.

9. Concerning the third traditional standard for equitable relief, it is clear that the balance of hardships tips in favor of an injunction. Without an injunction, the risk of harm to the public and damage to the environment will continue. On the other hand, an injunction tailored to allow the Olivers to re-commence their operation upon compliance with the Federal Plan Requirements will require no more of the Olivers than the regulations themselves already require, *viz.*, that the Olivers not receive and incinerate hospital/medical/infectious waste unless they can demonstrate compliance with the Federal Plan Requirements. Moreover, any hardship the Olivers may suffer from an injunction is the consequence their longstanding non-compliance with the law.

10. The final standard that requires an injunction to serve, or at least be consistent with, the public interest is clearly met here. It is in the interest of the public to have the public and the environment protected from noxious air emissions.

10. One last matter to be addressed is the Olivers' persistent refrain that if they continue to operate, then they will be able to come into compliance. This belief, even if

sincerely held, is belied by the facts in this case. It cannot be gainsaid that the Olivers' violations of the Federal Plan Requirements are of long standing and have continued in the face of both EPA and judicial determinations of non-compliance. The Olivers' latest plan to use recently acquired used equipment to achieve compliance is simply another in a series of gambits, all of which have proved ineffective.

11. In summary, considering the special circumstances noted above and the standards for the exercise of the court's equitable powers, and given the facts the court has found, a proper balancing of the equities requires the injunctive relief the United States seeks. The court will issue the permanent injunction requested by the United States, and prohibiting defendants from receiving, incinerating or otherwise handling any hospital/medical/infectious waste until they demonstrate to EPA and the court that they can and will operate in compliance with the Federal Plan Requirements.

B. Civil Penalty

12. Section 113(b) of the Act, 42 U.S.C. § 7413(b), provides: "The Administrator shall, as appropriate . . . commence a civil action . . . to assess and recover a civil penalty of not more than $25,000 per day for each violation." Pursuant to its statutory authority, EPA increased the penalty amounts to $27,500 per day for each violation occurring between January 30, 1997, and March 15, 2004, and $32,500 per day for each violation occurring thereafter. 40 C.F.R. § 19.2. The daily penalty was adjusted to $37,500 effective January 12 , 2009. *See* 73 Fed. Reg. 75340 (Dec. 11, 2009).

13. Section 113(e) of the Act, 42 U.S.C. § 7413(e), requires that when determining the amount of a civil penalty the court must take into consideration, in addition to any other factors justice may require: (1) the size of the business; (2) the penalty's economic impact on the business; (3) the violator's compliance history and good faith efforts to comply; (4) the duration of the violations established by the evidence; (5) payment of penalties previously assessed for the same violation; (6) the economic benefit of noncompliance; and (7) the seriousness of the violation.

14. The United States contends that when assessing penalties under the Act, courts generally presume that the maximum penalty should be imposed, citing *Pound v. Airosol Co., Inc.*, 498 F.3d 1089, 1095 (10th Cir. 2007) and *United States v. B & W Inv.*

Properties, 38 F.3d 362, 368 (7th Cir. 1994). Neither party has cited a Ninth Circuit case in point, and the court has found none. However, this court finds the discussion in *United States v. Anthony Dell'Aquilla, Enterprises, et al*., 150 F.3d 329 (3rd Cir. 1998), persuasive. There, at 150 F.3d 338-9, the appellate court had this to say in connection with a remand to the district court to compute a fine under the Act :

> [A]lthough courts may, and frequently do, begin at the maximum, we have never suggested that such a procedure is always appropriate. Moreover our research has not found any appellate decision that would suggest that method of determining a fine under the Clean Air Act is always the best way of proceeding.
>
> * * * There will be instances when doing so will initially set the bar so high that it will remain at a height that is inconsistent with the mitigating factors in § 7413(e)(1) even after it is lowered. Here, for example, the fine of nearly $3,000,000 bore no relationship to the violator's ability to pay. This is contrary to Congress mandate that courts consider "the economic impact of the penalty on the business." 42 U.S.C. § 7413(e)(1). The fine that is imposed must have some reasonable "nexus" to the violation and the violators. * * *
>
> Courts can achieve an equitable mitigation (if any is warranted in a particular case) either by starting at the maximum penalty and mitigating it downward based upon the factors in § 7413(e)(1), or simply relying upon those factors to arrive at an appropriate amount without starting at the maximum. The statute only requires that the fine be consistent with a consideration of each of the factors the court is obligated to evaluate.

15. Multiplying the Olivers' 7,336 violations by $30,000 (an estimated average penalty per violation for the time period in question) produces a maximum penalty of $220,080,000. A $220 million dollar penalty imposed on what may accurately be described in the vernacular as a "mom and pop operation" would set the bar far too high even after a rigorous consideration of any mitigating factors that might apply. The court declines the United States' invitation to start the penalty determination at the maximum.

16. The first factor Congress identified for consideration is the size of the business. The Olivers' business is a very small business which employs only two people, has little in the way of operating assets, and is poorly capitalized. This factor

indicates that the penalty should be far smaller than the $445,000 requested by the United States.

17. The second factor the court must consider is the economic impact of the penalty on the business. For the Olivers to operate their business in conformity with the Federal Plan Requirements will require significant additional investment from business owners who have only modest means, and a poor record for obtaining loans. Using a reasonable and conservative (but less conservative than the poverty level estimate originally provided by the Olivers) assumption about living expenses, the business produced net income to the Olivers on the order of $60,000 in 2005 and 2006, and $115,00 in 2007. This factor indicates that the penalty should be dramatically lower than the amount sought by the United States.

18. Section 113(e) of the Act next requires consideration of "the violator's full compliance history and good faith efforts to comply." The record here shows serious effort at the outset to learn what the rules were and to develop a strategy to comply. Over time as the business' inability to obtain financing became clear, this good faith effort deteriorated into wishful thinking, then evolved into a desperate effort to find a loophole in the regulatory scheme, and culminated in a willful continuation of operations in disregard of the EPA's determinations and this court's rejection of the Olivers' theory relating to co-fired combustor status. This factor does not warrant a reduction in any penalty amount that might be indicated by other considerations, and some of the conduct would support an upward adjustment to the penalty amount.

19. The statute also requires the court to consider the duration of the violations. Violations spanning the period from October 17, 2002, through August 1, 2007, have been established, and there can be no doubt that additional violations have occurred since August 1, 2007. This is a long span of time, and this factor warrants no reduction in the penalty that might otherwise apply. Indeed, it suggests some upward adjustment from the level that might otherwise be warranted.

20. Next, the statute directs the court to consider past penalty payments by the Olivers. There are none.

21. Section 113(e) of the Act also requires a court to consider the economic benefit of noncompliance. Testimony which estimates the economic benefit to the Olivers was given by the United States' expert witness, Jonathan Schefftz. Mr. Schefftz's testimony would conservatively support a finding of economic benefit of not less than $57,000, plus an unliquidated benefit from deferred maintenance costs plus, $403 per month for each month payment of the penalty were delayed beyond March 31, 2009. Using alternative approaches, Mr. Shefftz's testimony could support a substantially larger economic benefit of up to $295,000, plus $2,000 per month for each month beyond March 31, 2009.

22. Lastly, the Act requires the court to consider the seriousness of the Olivers' violations. Evidence of the seriousness of violations need not be in the form of emission test results from a facility that prove specific damage, but may instead come from EPA findings about the general dangers to public health or welfare posed by pollutants known to be emitted by the specific type of facility. As the Tenth Circuit noted in *Pound* 498 F.3d at 1099, "the mere absence of a measurable harm to the public or the environment stemming from a particular CAA violation does not necessarily indicate that a violation is not 'serious.'" The court concludes that the Olivers' violations were serious, but the lack of evidence of actual damage means they cannot be considered to fall in a category beyond serious, such as grave or severe. This factor does not warrant any reduction in the penalty.

23. Taking all of the facts found and given the court's assessment of the statutory factors as discussed above, a civil penalty of $75,000 is appropriate in this case.

IV. IMPOSITION OF PENALTY, ISSUANCE OF INJUNCTION , AND ORDER FOR LODGING PROPOSED JUDGMENT

Based on this court's findings of fact and conclusions of law, **IT IS ORDERED**:

(1) James Oliver and Nancy Oliver are jointly and severally liable to pay a civil penalty to the United States in the amount of $75,000.

(2) Effective at noon on July 1, 2009, James Oliver and Nancy Oliver are permanently enjoined from receiving, incinerating, or handling hospital/medical/infectious waste, the only exception being for delivery of any such waste they may still have on their property at noon on July 1, 2009, to an appropriate entity for lawful disposal. This injunction will remain in place until the Olivers demonstrate to EPA and the court that their incineration business can and will be operated in conformity with the Federal Plan Requirements.

(3) On or before July 10, 2009, the United States shall lodge for the court's consideration a proposed form of judgment ordering payment of $75,000 as a civil penalty and imposition of a permanent injunction.

DATED at Anchorage, Alaska, this 24th day of June 2009.

/s/ JOHN W. SEDWICK
UNITED STATES DISTRICT JUDGE