UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

BEFORE THE ADMINISTRATOR

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In the Matter of

LVI ENVIRONMENTAL SERVICES, INC.,

Docket No. CAA-09-97-10

Respondent

INITIAL DECISION

By: Charles E. Bullock Administrative Law Judge

Issued: June 28 , 2000 Washington, D.C.

Appearances

For Complainant:	Carol Bussey, Esquire Office of Regional Counsel
	U. S. Environmental Protection Agency
	Region IX
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For Respondent:	Burton T. Fried, Esquire
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INTRODUCTION

The Complaint in the instant case was filed on September 30, 1997. This case was brought by the Director of the Air Division of the United States Environmental Protection Agency, Region IX ("Complainant" or "EPA") under section 113(d) of the Clean Air Act (the "Act" or "CAA"). Section 113(d) authorizes the EPA to assess administrative penalties if a person is found to have violated any of the requirements of the Act. The Complaint alleges that the Respondent, LVI Environmental Services, Inc., violated the National Emissions Standards for Hazardous Air Pollutants ("NESHAP") for asbestos, 40 C.F.R. part 61 subpart M, which are regulations promulgated under Sections 112 and 114 of the Act. The Complaint charges Respondent with two counts of violating the NESHAP. The first count charges Respondent with failure to provide, prior to renovation, notification of Respondent's intent to conduct renovation activities as required by 40 C.F.R. § 61.145(b). The second count charges Respondent with failure to keep regulated asbestos-containing material adequately wet until collected for disposal, as required by 40 C.F.R. § 61.145(c)(6). Respondent filed an Answer to the Complaint on November 5, 1997, denying the violations alleged in the Complaint.

The Complainant and Respondent presented testimony and evidence in a hearing which was held on June 30 and July 1, 1999, in Phoenix, Arizona. Complainant presented testimony of six witnesses, namely Frank Bonillas, William G. Islas, Robert S. Pyeatt, James S. Goodballet, Robert Trotter, and Paul Jalbert, and presented Exhibits ("Ex.") C-1, C-4, C-5, C-5a, C-6 through C-11, and C-13 through C-15. Respondent presented testimony of two witnesses, John D. Maddox and John A. Tancredi, and presented Exhibits R-1 through R-6. The parties jointly submitted Exhibit J-1 which reflects joint stipulations agreed to by the parties. Following the hearing, initial briefs were submitted by Complainant on August 27, 1999, and by Respondent on August 26, 1999; reply briefs were submitted by Complainant and Respondent on September 24 and 27, 1999, respectively.

FINDINGS OF FACT

Respondent is an asbestos and lead abatement contractor that is a wholly-owned subsidiary of LVI Services, Inc., which is a wholly-owned subsidiary of LVI Finance Corporation, which is a wholly-owned subsidiary of LVI Holding Corporation. Ex. J-1, R-5. Respondent is an Oklahoma corporation with a place of business in Phoenix, Arizona. Ex. J-1. Respondent was hired by Davis Monthan Air Force Base ("DMAFB") for a renovation of Building 1540 ("Facility" or "site") located at 1380 South Craycroft Road, Davis Monthan Air Force Base in Tucson, Arizona. Ex. J-1, C-6. Building 1540 occupies approximately 50,000 square feet. Ex. J-1. It was used as a hangar, so most of the roof is arched, from the east to the west sides of the roof, except for some flat and sloped portions on the edges. Ex. R-2. The renovation project included the removal of roofing material from the Facility. Ex. C-6. On March 25, 1997, Respondent commenced renovation work at the Facility. Ex. J-1.

On or about March 24, 1997, Respondent submitted to the Pima County Department of Environmental Quality ("PDEQ") a form entitled "NESHAP [National Emission Standards for Hazardous Air Pollutants] Notification for Renovation and Demolition Activities." Ex. C-7; Transcript ("Tr.") 16. On that Notification, Respondent represented that 50,120 square feet of Category I nonfriable asbestos-containing material ("ACM") was to be removed by hand or non-mechanical tools, starting on March 25, 1997. Ex C-7.

On March 31, 1997, Frank Bonillas, asbestos NESHAP coordinator of the PDEQ, made an inspection of Respondent's renovation activities at the Facility, in response to a complaint from Robert S. Pyeatt, DMAFB Chief of Contract Execution. Ex. C-1; Tr. 17-18, 72. Mr. Pyeatt complained that, *inter alia*, Respondent was using a mechanical saw with a rotating blade, rather than hand tools, to remove roofing material. Ex. C-1; Tr. 72-73, 87-88. Scott Goodballet, vicepresident of Respondent and Eric Bowers, Respondent's site supervisor, along with Mr. Pyeatt and others, were present at the Facility during the inspection. Ex. C-1; Tr. 18, 65, 88, 112.

A. Facts as to whether the roof renovation was subject to the asbestos NESHAP

During the inspection, Mr. Bonillas observed on the site near a storage shed, a Vanguard Power Saw, 9 horsepower, with a rotating blade. Tr. 20-21, 30; Ex. C-1, photographs 24, 25, 26, and 27. On the basis of markings on the roofing material and the exposed cut edges, Mr. Bonillas believed that roofing material had been cut with a rotating blade roof cutter ("RB roof cutter"). Tr. 21-23; Ex. C-1, photographs 1, 2, 3 and 4. Mr. Bonillas reported in his Inspection Report that most of the area where the roofing had been removed or cut into squares was cut with a RB roof cutter, including the entire west side of the roof, as indicated by the exposed cut edges. Ex. C-1. The Inspection Report stated that Eric Bowers said that only about one third of the East side of the roof was cut with the RB cutter. Id. On the surface of the roof, Mr. Bonillas testified, he observed roofing saw debris. Tr. 23-24; Ex. C-1 photographs 6, 7, 8, 9, 10. He testified that the roofing debris was friable because it was ground up by the roofing saw. Tr. 26. He testified further that he, along with Eric Bowers, measured with Respondent's measuring wheel the area which had been cut, after Mr. Bowers zeroed the measuring wheel. Ex. C-1; Tr. 25, 41. Mr. Bonillas measured the total roof area that was cut as 9,828 square feet. Id. The Inspection Report states that the total area cut by the RB roof cutter was measured as 7,476 square feet. Ex C-1.

Mr. Bonillas took seven samples of the roofing material during the inspection. Ex. C-1; Tr. 26. He submitted the samples to a laboratory, Fiberquant, Inc., for analysis. Ex. C-1. A completed Chain of Custody Record, with signatures of Mr. Bonillas and Karen Grant, the recipient at the laboratory, along with a "Fed Ex" notation on the Chain of Custody Record and a Federal Express airbill, show that the seven samples were shipped on April 3, 1997, and received at the laboratory the next day. Ex. C-1, C-17; Tr. 39.

Fiberquant, Inc. ("Fiberquant") analyzed the samples by the Polarized Light Microscopy (PLM) method. Ex. C-1. The laboratory analyst's name signed on Fiberquant's laboratory analysis report is Robert A. McCormick. *Id.* Five of the samples, upon analysis, were found not to contain asbestos. Tr. 26; Ex. C-1. The first three of these samples were taken from the very top of the arched ("domed") roof. Ex. C-1. The first was described in the Inspection Report as several layers of black asphaltic roofing felt with a white painted surface (sample number 1-3-31-97), the second as mostly black saw debris (sample number 2-3-31-97), and the third as brown insulation material (sample number 3-3-31-97). *Id.* The fourth and sixth samples were taken from the lower end of the west roof, and were described as several layers of black asphaltic felts with white painted surface (sample numbers 4-3-31-97). *Id.*

The fifth and seventh samples consisted of roofing saw debris taken from the lower end of the west roof, and were described in the Inspection Report as mostly black with white paint, and designated as sample numbers 5-3-31-97 and 7-3-31-97 ("Samples 5 and 7"). *Id.* Each of the samples, analyzed as whole samples, were found to contain less than or equal to one percent of chrysotile asbestos, according to the Fiberquant laboratory analysis report. *Id.* This amount of asbestos is classified as a "borderline negative" result. *Id.* However, a subsample of paint contained in each of Samples 5 and 7 was analyzed by PLM point counting, according to the Fiberquant laboratory report. *Id.* A point count showed the silver paint in Sample 5 to contain 6.25 percent asbestos and showed the silver paint in Sample 7 to contain 4.25 percent asbestos. *Id.*; Tr. 37. The Fiberquant laboratory report indicated that five percent of the material of Samples 5 and 7 consisted of silver paint. Ex. C-1. The Fiberquant laboratory report showed that there was no silver paint in the other samples, except for a trace of silver paint in sample number 1-3-31-97, which was too thin to analyze. *Id.*

Complainant presented two additional reports of PLM analysis of asbestos samples taken at DMAFB. One was prepared by Terracon Consultants Western, Inc. (Terracon) in November 1994. Ex. C-5. Terracon took seven roofing samples and three mastic samples from the roof of Building 1540. The seven roofing samples appear to be taken from within 50 feet of the edge of the roof, according to Terracon's sketch of the roof showing the sampling locations.¹ Of the

¹The sketch shows only an outline of the roof and the sample locations for roof samples and mastic samples, and states a scale of one inch for 50 feet. Ex. C-5. Of the three mastic samples from the roof of Building 1540 and reported in the Terracon Report, two were found positive for asbestos and the third was "borderline positive," containing between one and two percent asbestos. Ex. C-5. However, the roofing mastic appears to be limited to certain small areas of the roof. Respondent's witness John Tancredi, who has training and experience in asbestos inspections, testified that "mastic material is used in isolated places where the roofing ends . . . like a flashing around a drain pipe . . . penetration in the roof, a mechanical piece of equipment." Tr. 214. Consistent with his testimony, Mr. Bonillas did not take samples of roofing mastic, and the Terracon report only sampled mastic material in the areas of flashing and roof penetration. Ex. C-5 . This Initial Decision does not rely on the results of the mastic samples to (continued...)

seven roofing samples, Terracon Sample Number 3 was found upon analysis to contain between five and ten percent chrysotile asbestos, described as a "positive" result for asbestos, and Terracon Sample Number 4 was found to contain between one and two percent chrysotile asbestos, which is described as a "borderline positive" result for asbestos. Terracon Sample Number 3 appears from the sketch to be taken from a location almost 25 feet from the east edge of the roof, and Terracon Sample Number 4 appears to be taken from a location between 25 and 50 feet from the south and east edges of the roof. Terracon Sample Number 1 was found upon analysis not to contain asbestos. Terracon Sample Numbers 2, 5, 6 and 7 were found to contain up to one percent chrysotile asbestos, characterized as a "borderline negative" result. The Terracon samples which were "negative" or "borderline negative" for asbestos appear from the sketch to be taken from the edge of the roof, and were taken from the northeast, northwest, and southwest quadrants of the roof. Ex. C-5.

A table in the Terracon report, summarizing the sample results for each building sampled, lists Building 1540 as having "positive" results, meaning, according to the report, that "any one layer of the sample contains asbestos in excess of 1%." *Id.* The first page of the report describes the sampling procedures used to sample the 17 roofs at DMAFB, one of which was the roof of Building 1540, that were the subject of the report:

Laboratory test results of the built-up roof materials show percentages of asbestos content on a layer by layer basis. Samples were taken of the roofing materials to the depth of the first concrete, wood, or metal substrate on the seventeen roofs sampled. In some samples the paint on the roof surface was the asbestos-containing material. In others, felt layers contained a high percentage of asbestos. . . . Some roofs such as building 1540 . . . showed positive results on portions of the roof but not in all roof samples.

Id. The report states further that "[t]he enclosed test analysis sheets indicate which layer contains the asbestos and the approximate percentages." *Id.* However, no such test analysis sheets were included in Complainant's exhibits. William G. Islas, staff engineer at Terracon, and a certified building inspector under AHERA (Asbestos Hazard Emergency Response Act, 15 U.S.C. §§ 2641-2656), testified as to the sampling locations, results and conclusions in the Terracon report. Tr. 52-56. However, he had not seen the roof of Building 1540, did not know whether the roofing material was "homogenous," and did not know whether Terracon Sample Number 3 was taken from the domed area of the roof, or whether it was taken from the roof area that was removed by Respondent. Tr. 55, 58-60. His testimony did not disclose any information about layers of the samples.

The other report of asbestos sampling at DMAFB was prepared in 1996 by Western Technologies, Inc., which took samples of several different types of suspect asbestos-containing

¹(...continued) support its conclusions.

materials from Building 1540. Ex. C-13. The cover letter to the report, summarizing the survey, states, among other things, that "all roofing materials should be considered Category I ACBMs [asbestos-containing building materials]." Ex. C-13. Western Technologies took three samples of roofing material, Sample Numbers 1540R-16, -17 and -18. Less than one percent (0.93%) of chrysotile asbestos was detected in Sample number 1540R-17, taken from the northern east side of the roof. Sample Number 1540R-16, taken from the central east side of the roof, and Sample Number 1540R-18, taken from the southern east side of the roof, upon analysis were found to contain six percent chrysotile asbestos. The asbestos was found in the brown or dark brown felt and in the silver paint components of all three samples. Both the silver paint and the felts also contained asphalt. Sample Number 1540R-16 included silver paint containing 10% asbestos, and brown felt containing 60% asbestos. Sample Number 1540R-17 included two layers of silver paint, containing respectively 5% and 7% asbestos, and brown felt containing 55% asbestos. Sample Number 1540R-18 included silver paint containing 4% asbestos, and dark brown felt containing 30% asbestos.

The record does not include any map, or precise description, of where the Western Technologies samples were taken. However, Steven Collins, Senior Environmental Scientist of Western Technologies, who signed the report (Ex. C-13) sent a letter, dated December 18, 1997, to Respondent, responding as follows to the question of where the samples were collected:

WT [Western Technologies] did not, nor was requested to, sample the main domed (curved) roof. The samples pertain only to the lower east portico roof area and equipment located there. Considering the age of the facility, WT would not consider the roofs homogenous. Had WT been requested to sample the domed roof at the same time as the east portico roof, WT would have collected additional samples from the domed roof.

Ex. R-1. See, Tr. 220-221.

An examination of the architectural plans for repairing the roof of Building 1540 reveals that along the east and west edges of the roof, there are sloping ("shed") roofs and flat roofs approximately 20 feet wide, extending out from the edges of the arched ("domed") roof. Ex. R-2. Along approximately 170 feet of the east and west edges of the arched roof, is a clerestory sloping ("shed") roof which is approximately 18 feet wide. The plans show that the roofing material from all of those roofs was to be removed. On page C-1 of the plans is what appears to be a map of the location of samples taken by Terracon, although a notation on the map indicates that it is not to scale. Ex. R-2. A comparison of that map with the architectural plans reveals that Terracon Sample Number 3 appears to be taken from a flat roof which extends eastward from the arched roof. *Id.* Mr. Pyeatt testified that Terracon Sample Number 3 was not taken from the domed portion of the roof. Tr. 104-105. He testified that Terracon Sample Number 4 appears to

be taken "right off the dome where it's starting to go in that first slant . . . and possibly right at the intersection of the two." Tr. 105.

John Tancredi, LVI Services' Corporate Director of Health and Safety, has had significant training and experience in environmental health, including asbestos control, and was certified as a building inspector under AHERA. Tr. 205-208. He is responsible for health and safety of the workers at LVI Services and its subsidiaries. Tr. 208. Upon his review of the architectural plans of Building 1540 (Ex. R-2) he testified that the building has multiple roofs, referring to the different levels and elevations of the roofs, and the "flat roof," "arch roof," and "shed roof." Tr. 209-210. He testified that the roofs are "definitely not homogenous" but "are different roofs," with "different composition, based on other information, they are different in color [and] different in texture." Tr. 210. Upon comparison of the plans with the Terracon survey and roof sketch (Ex. C-5), Mr. Tancredi testified that Terracon Sample 3 was "without question" taken from the lower flat roof, and that Terracon Sample 4 was taken from the upper shed roof, and not the upper dome roof. Tr. 215-216. In his opinion, a sample from one of the roofs that was positive for asbestos. Tr. 211.

Mr. Tancredi testified that Respondent sampled the domed part of the roof to determine whether or not it contained asbestos, and that sampling results were provided in writing to DMAFB, EPA and PDEQ. Tr. 258, 262. However, no such sampling results were introduced into the record. The only information in the record as to those results was Mr. Tancredi's hearsay testimony, in response to a question as to whether Respondent indicated to DMAFB that a portion of the job was not asbestos: "I've been told that, in fact, they did tell them that it was not asbestos-containing and that they told them they didn't care." Tr. 259.

Mr. Bonillas observed what he described in the Inspection Report as "saw debris . . . scattered throughout the cut area," and "ground roofing material" on the roof of Building 1540. Ex. C-1. He advised Mr. Goodballet to treat all of the roofing saw debris as RACM, according to the Inspection Report. *Id.* Mr. Bonillas testified that the roofing debris was friable, that it was in "small particles," "fine, ground up material" and "anywhere from a few millimeters in size," but that it "wasn't fine powder." Tr. 26, 34, 36, 40. The photographs taken by Mr. Bonillas at the inspection depict "saw debris" and the cut edges of the roofing material, described in the report as cut with an RB roof cutter. Ex. C-1, photographs 2, 3, 4, 6, 7, 8, 9, 10, 17, 20, 21, 23.

Mr. Pyeatt testified that on the morning of March 31, 1997, as he was standing on the ground, he observed dust being generated from an RB roof cutter that Respondent was using to remove the domed area of the roof. Tr. 72-74, 80, 87-89, 93, 108.

Scott Goodballet, Operations Manager and Vice President of Respondent at the time of the alleged violations, testified that Respondent initially used hand tools to remove the roofing material, but later used a roof removal machine with a rotating blade, in order for the roof removal to proceed faster. Tr. 109, 111-112, 128. The machine had a blade guard, one purpose of which is to keep debris from flying back. Tr. 117-118; 261-262. It also had a connection for

misting the blade and roof material with water. Tr. 117-118. However, he was not present during the operation of the machine. Tr. 118.

A blade with a cutting edge at both ends, which Mr. Goodballet testified was used on the roof of Building 1540, was offered by Respondent and accepted into evidence. Ex. R-3; Tr. 121-122. The blade is approximately 9 inches long. Ex. R-3. Mr. Goodballet testified that a "knife-sharpening place" sharpened the blades to approximately 1/16 of an inch thickness. Tr. 122. For comparison, Respondent also offered into evidence a roof cutting blade with a cutting edge width of approximately 3/16 inch, which was not used at the site. Ex. R-4; see Tr. 123-124, 228. That blade is approximately 12 inches long. Ex. R-4. In Mr. Tancredi's opinion, use of the blade which was used at the site, Ex. R-3, would be exempt from the asbestos NESHAP regulations, because it causes slicing of the roof rather than cutting of the roof, and is thus exempt from the definition of RB roof cutting. Tr. 229-230. Apparently in an effort to diminish the significance of the debris produced by use of the blade, Mr. Tancredi testified that, in his experience witnessing manual roof removal operations, he observed "[s]mall particulate debris, little chunks of material" being generated. Tr. 239.

B. Facts as to notification of renovation activity

On or about March 24, 1997, Respondent submitted to the PDEQ a form entitled "NESHAP Notification for Renovation and Demolition Activities," marked "Courtesy." Ex. C-7; Tr. 16. On that Notification, Respondent represented that 50,120 square feet of Category I nonfriable ACM was to be removed. Ex C-7. The postmark on the Notification is March 24, 1997, and was received by PDEQ on March 26, 1997. *Id;* Tr. 44. The Notification stated, and the parties stipulated, that Respondent commenced renovation work on March 25, 1997. Ex. J-1, C-7. The Notification indicated that only hand or non-mechanical tools were to be used, and did not indicate that any RACM would be generated. *Id.* The Notification was not certified and signed by an AHERA certified asbestos building inspector. Ex. C-7; Tr. 29.

Apparently pursuant to Mr. Bonillas' instruction at the inspection, Respondent submitted a revised Notification, which was received by the PDEQ on or about April 3, 1997. Ex. C-1, C-7. The revised Notification adds information that 2400 square feet of RACM was to be removed, and that mechanical/power tools were to be used, and shows a checked box marked "Asbestos-Containing Roof Remove >5580 sq ft w/rotating blade cut." *Id.* The revised Notification includes a signed certification by an AHERA certified asbestos building inspector, and indicates the completion date for asbestos removal as April 30, 1997. *Id.*

C. Facts as to whether Respondent kept RACM adequately wet until collected for disposal

Mr. Bonillas stated in the Inspection Report and at the hearing that the saw debris was dry. Ex. C-1; Tr. 24. He explained at the hearing that he determined that the material was not

adequately wet when he sprayed with water the material to be sampled, and observed that it turned darker in color. Tr. 24-25. The Inspection Report states that he sprayed sample number 3-3-31-97 (the brown insulation material) with water and that it changed color, but the Inspection Report does not refer to spraying the other samples. Ex. C-1, photographs 18, 19. Mr. Bonillas testified that it was his normal practice to spray every sample. Tr. 32. Both Mr. Bonillas and Mr. Pyeatt testified that they did not see a water hose on the roof. Tr. 32-33, 89-90. Tr. 89-90. Mr. Bonillas' Inspection Report states, however, that Eric Bowers indicated that two garden hoses were being used on the roof for wetting the waste debris. Ex. C-1. Some of the photographs taken by Mr. Bonillas on the roof show what appears to be a hose, but it cannot be determined conclusively from the photographs that a hose was on the roof during the inspection. Ex. C-1 photographs 4, 18, 19.

Mr. Pyeatt testified that on the morning of March 31, 1997, he observed dust being generated from Respondent's RB roof cutter, and observed Respondent not wetting the roofing debris when using the roof cutter. Tr. 72-74, 80, 81, 86, 87-89. The record indicates, however, that Respondent's RB roof cutter had a connection for misting the blade and roof material with water. Tr. 117-118; Ex. C-1.

STATUTORY AND REGULATORY PROVISIONS

Section 112(b) of the Clean Air Act lists asbestos as a hazardous air pollutant, and Sections 112 and 114 of the Act authorize EPA to establish emission standards and requirements for hazardous air pollutants. Pursuant thereto, EPA promulgated the National Emission Standards for Hazardous Air Pollutants (NESHAPs), at 40 C.F.R. part 61. The NESHAP for asbestos is at 40 C.F.R. part 61 subpart M. The standard for demolition and renovation activities involving asbestos is set forth at 40 C.F.R. § 61.145, which includes the following requirements, in pertinent part:

(b) *Notification requirements*. Each owner or operator of a demolition or renovation activity . . . shall:

(1) Provide the Administrator with written notice of intention to demolish or renovate.

* * * *

(3) Postmark or deliver the notice as follows:

(i) At least 10 working days before asbestos stripping or removal work or any other activity begins (such as site preparation that would break up, dislodge or similarly disturb asbestos material) * * * *

(c) *Procedures for asbestos emission control*. Each owner or operator of a . . . renovation activity . . . shall comply with the following procedures:

* * * *

For all RACM, including material that has been removed or stripped:

(i) Adequately wet the material and ensure that it remains wet until collected and contained or treated in preparation for disposal * * * *

40 C.F.R. § 61.145(b), 61.145(c)(6). The term "adequately wet" is defined as "sufficiently mix or penetrate with liquid to prevent the release of particulates."

These notification and emission control requirements, Sections 61.145(b) and (c), apply

to:

each owner or operator of a demolition or renovation activity, including the removal of RACM as follows:

* * * *

(4) In a facility being renovated . . . if the combined amount of RACM to be stripped, removed, dislodged, cut, drilled, or similarly disturbed is
(i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components * * * *.

40 C.F.R. § 61.145(a). RACM is defined, *inter alia*, as friable ACM, Category I nonfriable ACM that has become friable, or Category I nonfriable ACM that "will be or has been subjected to sanding, grinding, cutting or abrading." 40 C.F.R. § 61.141. The term "grinding" means "to reduce to powder or small fragments and includes mechanical chipping or drilling." *Id*. The term "cutting" means "to penetrate with a sharp-edged instrument and includes sawing, but does not include shearing, slicing or punching." *Id*. Category I nonfriable ACM is defined as including "asphalt roofing products containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 C.F.R. part 763, section 1, Polarized Light Microscopy, that when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure." *Id*.

To clarify these provisions, EPA published in the Code of Federal Regulations, as appendix A to the asbestos NESHAP (subpart M), an Interpretive Rule Governing Roof Removal Operations ("Asbestos NESHAP Interpretive Rule"). This Rule provides as follows, in part:

I. Applicability of the Asbestos NESHAP

* * * *

1.2. * * * Asphalt roofing products which may contain asbestos include built-up roofing; . . . asphalt-containing underlayment felts; asphalt-containing roof coatings and mastics, and asphalt-containing base flashings. ACM roofing products that use other bituminous or resinous binders (such as coal tars or pitches) are also considered to be Category I ACM.

* * * *

A. Threshold Amounts of Asbestos-Containing Roofing Material

1.A.1.* * * * EPA has determined that where a rotating blade (RB) roof cutter or equipment that similarly damages the roofing material is used to remove Category I nonfriable asbestos-containing roofing material, the removal of 5580 ft^2 of that material will create 160 ft² of RACM. For the purposes of this interpretive rule, "RB roof cutter" means an engine-powered roof cutting machine with one or more rotating cutting blades the edges of which are blunt. (Equipment with blades having sharp or tapered edges, and/or which does not use a rotating blade, is used for "slicing" rather than "cutting" the roofing material; such equipment is not included in the term "RB roof cutter".) Therefore it is EPA's interpretation that when an RB roof cutter or equipment that similarly damages the roofing material is used to remove Category I nonfriable asbestos-containing roofing material, any project that is 5580 ft² or greater is subject to the NESHAP; conversely, it is EPA's interpretation that when an RB roof cutter or equipment that similarly damages roofing material is used to remove Category I nonfriable asbestoscontaining material in a roof removal project that is less than 5580 ft², the project is not subject to the NESHAP EPA further construes the NESHAP to mean that if slicing or other methods that do not sand, grind, cut or abrade will be used on Category I nonfriable ACM, the NESHAP does not apply, regardless of the area of roof to be removed.

* * * *

1.A.3. Only roofing material that meets the definition of ACM can qualify as RACM subject to the NESHAP. Therefore, to determine if a removal operation that meets or exceeds the coverage threshold is subject to the NESHAP, any suspect roofing material (*i.e.* roofing material that may be ACM) should be tested for asbestos. If any such roofing material contains more than one percent asbestos and if the removal operation is covered by the NESHAP, then EPA must be notified and the work practices in § 61.145(c) must be followed. In EPA's view, if a removal operation involves at least the threshold level of suspect material, a roofing contractor may choose not to test for asbestos if the contractor follows the notification and work practice requirements of the NESHAP.

C. Cutting vs. Slicing and Manual Methods for Removal of Category I ACM

1.C.1. Because of damage to the roofing material, and the potential for fiber release, roof removal operations using rotating blade (RB) roof cutters or other equipment that sand, grind, cut or abrade the roof material are subject to the NESHAP. As EPA interprets the NESHAP, the use of . . . methods that slice, shear, or punch (using equipment such as a power slicer or power plow) does not constitute "cutting, sanding, grinding or abrading." This is because these methods do not destroy the structural matrix or integrity of the material such that the material is crumbled, pulverized, or reduced to powder. Hence, it is EPA's interpretation that when such methods are used, assuming that the roof material is

not friable, the removal operation is not subject to the regulation. * * * *

1.C.3. As noted previously, the NESHAP only applies to the removal of asbestoscontaining roofing materials. Thus, the NESHAP does not apply to the use of RB cutters to remove non-asbestos built-up roofing (BUR). On roofs containing some asbestos-containing and some non-asbestos-containing materials, coverage under the NESHAP depends on the methods used to remove each type of material in addition to other coverage thresholds specified above. For example, it is not uncommon for existing roofs to be made of non-asbestos BUR and base flashings that do contain asbestos. In that situation, EPA construes the NESHAP to be inapplicable to the removal of the non-asbestos BUR using an RB cutter so long as the RB cutter is not used to cut 5580 ft² or more of the asbestos-containing base flashing or other asbestos-containing material into sections. In addition, the use of methods that slice, shear, punch or pry could then be used to remove the asbestos flashings and not trigger coverage under the NESHAP.

II. Notification

2.1. * * * * If the operation is a renovation, and Category I roofing material is being removed using either manual methods or slicing, notification is not required by the NESHAP. * * * * [i]f the renovation involves less than the threshold area for applicability as discussed above, then no notification is required. However, if roof removal meets the applicability and threshold requirements under the NESHAP, then EPA . . . must be notified in advance of the removal in accordance with the requirements of § 61.145(b) * * *

As noted above, to determine whether a sample contains Category I nonfriable ACM, "asphalt roofing products containing more than 1 percent asbestos," the PLM method specified in 40 C.F.R. part 763, subpart E ("Asbestos-Containing Materials in Schools" regulations promulgated under AHERA), appendix E must be utilized. Appendix E provides, in part: "Bulk samples of building materials taken for the identification and quantitation of asbestos are first examined for homogeneity at a low magnification When discrete strata are identified, each is treated as a separate material so that fibers are first identified and quantified in that layer only, and then the results for each layer are combined to yield an estimate of asbestos content for the whole sample."

DISCUSSION AND CONCLUSIONS AS TO LIABILITY

The initial question presented is whether the NESHAP requirements are applicable to Respondent's renovation activities at Building 1540. Complainant has the "burdens of presentation and persuasion that the violation occurred as set forth in the complaint" and each matter of controversy must be decided upon a preponderance of the evidence. 40 C.F.R. § 22.24. Complainant must establish by a preponderance of the evidence that a rotating blade roof cutter, or equipment that similarly damages the roofing material, was used by Respondent to remove at least 5580 square feet of Category I ACM on Building 1540. Respondent believes that Complainant's evidence was weak and did not meet the burden of proof to show that the roofing material on Building 1540 was ACM, that the roofing material was removed by Respondent with an RB roof cutter or was rendered friable RACM, and that the amount of RACM exceeded the regulatory threshold.

The first issue to determine is whether Complainant has established by a preponderance of the evidence that roofing material on Building 1540 was Category I ACM.

A. Whether roofing material was ACM

To determine whether the roof of Building 1540 is subject to the asbestos NESHAP, it is not necessary to find that a sample of roofing material as a whole contains more than one percent asbestos. A roof may consist of several layers of materials or products, only one of which may contain Category I ACM. The NESHAP applies if *any* of the roofing *material* or *product* contains more than one percent asbestos, and exceeds the threshold amount of RACM. 40 C.F.R. part 61 subpart M appendix A, sections 1.2, 1.A.3, 1.C.3. Therefore, the fact that two samples taken by Mr. Bonillas were only "borderline" -- less than or equal to one percent asbestos -- as whole samples, does not render them insufficient to support a finding that the roof was subject to the asbestos NESHAP.

As to whether any of the roofing materials on Building 1540 were Category I ACM, the first question is whether there were any "asphalt roofing products containing more than 1 percent asbestos." 40 C.F.R. § 61.141. Asphalt roofing products include "asphalt-containing roof coatings and mastics," built-up roofing ("BUR") and "asphalt-containing underlayment felts." 40 C.F.R. part 61 subpart M appendix A. The silver paint in two of the samples taken by Mr. Bonillas (and analyzed by Fiberquant) contained more than one percent asbestos, and the silver paint and roofing felts in three of the samples analyzed by Western Technologies contained more than one percent asbestos. Ex. C-1, C-13. The silver paint and roofing felts also contained asphalt. Ex. C-13. Therefore, the roof of Building 1540 included asphalt roofing products which are Category I ACM.

The roof also included materials that do not contain asbestos, as the analysis of samples by Fiberquant and Western Technologies show that tar/asphalt, some paint, some felt, and

insulation roofing components did not contain asbestos. Ex. C-1, C-13. Therefore, the next question is whether the entire roof of Building 1540 contained ACM, or whether some discrete area or areas of the roof did not contain ACM.² The testimony and evidence shows that the roof of Building 1540 is not one contiguous roof, but that portions of the roof have different pitches and levels. Tr. 102-3; Ex. R-2, Ex. C-1. Some roof surfaces were painted white, and some were covered with gravel. Tr. 70; Ex. C-1, Ex. C-13. The roofing was composed of several different layers of materials: felts, silver paint, white paint, asphalt, and insulation. Ex. C-1, C-13. The samples referenced in the reports in evidence did not each contain an equal distribution of these materials. *Id.* The letter from Western Technologies stated that it "would not consider the roofs homogenous," but this statement was based merely on the age of the facility rather than any sampling or analysis of the roof, there is no evidence in the record which establishes that any distinct portion or portions of the roof contained different materials from other areas. Mr. Tancredi's testimony that the roofs were of "different composition," color and texture (Tr. 210), is not specific, and does not establish any more difference in composition

²Complainant proffers an EPA guidance document entitled "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials." Ex. C-14. This document states that one should "[g]roup friable surfacing material into 'homogenous' Sampling Areas" and that "a homogenous area contains friable material that is uniform in texture and color and appears identical in every other respect." *Id.* The document states, "If one or more samples from a Sampling Area has more than 1% asbestos, then treat the Sampling Area as if it contains asbestos." *Id.* Complainant also proffers advisory letters written by John B. Rasnic, Director of the Stationary Source Compliance Division of the EPA's Office of Air Quality Planning and Standards, responding to questions about determining the presence of asbestos, for purposes of the asbestos NESHAP, in plaster and in fireproofing material sprayed on steel columns. Ex. C-15. They advise that, where the majority of samples contain no asbestos, but the material is homogenous or the areas not containing asbestos cannot be isolated from those containing asbestos, all of the material would be considered asbestos-containing.

These documents are based upon the regulation governing Asbestos-Containing Materials in Schools, which provides at 40 C.F.R. § 763.87(c):

⁽¹⁾ A homogenous area is considered not to contain ACM only if the results of all samples required to be collected from the area show asbestos amount of 1 percent or less. (2) A homogenous area shall be determined to contain ACM based on a finding that the results of at least one sample collected from that area shows that asbestos is present in an amount greater than 1 percent.

The regulation defines "homogenous area" as "an area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture." 40 C.F.R. § 763.83. In turn, "miscellaneous material" means "interior building material"

That regulation by its terms, and the guidance document and advisory letters presented by Complainant, address the interior of buildings, not roofs, and do not apply specifically to roofs which are composed of several different layers of materials. Neither the asbestos NESHAP nor its Interpretive Rule refer to "homogenous areas" or to 40 C.F.R. § 763.87.

than the fact that some parts of the roof were covered in gravel and some were painted white.

Complainant established that silver paint Category I ACM existed at the lower end of the west roof of Building 1540. Ex. C-1. The two silver paint samples from that area contained 6.25 and 4.25 percent asbestos respectively. *Id.* The record shows paint and/or felt Category I ACM, containing between one and ten percent asbestos, existed on the central east flat roof and on either the clerestory shed roof or the arched roof near the southeast corner of the building, and that some asbestos-containing material existed on the western side of the roof, probably on the clerestory shed roof and/or the arched roof. Ex. C-5; Tr. 105, 215-216. The record shows further that silver paint Category I ACM, containing four to ten percent asbestos, and felt Category I ACM, containing 30 to 60 percent asbestos, existed at the central east side, northern east side and southern east side of the portico roof. Ex. C-13; Ex. R-1.

Furthermore, Respondent admitted on its Notification to PDEQ that the roof contained 50,120 square feet of ACM. Ex. C-7. The Notification is a report which is required to be kept by law (40 C.F.R. § 61.145(b)). A long line of cases hold that a defendant's liability may be established on the basis of facts stated in a record or report which is required by law to be kept. PIRG of New Jersey v. Yates Industries, 757 F. Supp. 438, 447 (D. N. J. 1991); United States v. CPS Chemical Co., Inc., 779 F.Supp. 437, 442 (E.D. Ark. 1991); Sierra Club v. Simkins Industries, Inc., 847 F.2d. 1109, 1115 n. 8 (4th Cir. 1988); Chesapeake Bay Foundation v. Bethlehem Steel Corp., 608 F.Supp. 440, 451 (D. Md. 1985); SPIRG of New Jersey, Inc. v. Fritsche, Dodge & Olcott, 579 F.Supp. 1528, 1538 (D. N.J. 1984), aff'd on other grounds, 759 F.2d 1131 (3d. Cir. 1985); SPIRG, Inc. v. Monsanto Co., 600 F.Supp. 1479, 1485 (D. N.J. 1983); United States v. Ward, 448 U.S. 242 (1980). It is noted that these cases involve Discharge Monitoring Reports (DMRs) required under the Clean Water Act to record pollutant monitoring results. Like a DMR, a notification of renovation activity required under the asbestos NESHAP includes a signed certification that the information therein is correct. Ex. C-7; 608 F.Supp. at 451; 40 C.F.R. § 61.145(b)(5); 40 C.F.R. § 122.22(d). However, the notification of renovation activity requires merely an estimate of the approximate amount of RACM to be removed. 40 C.F.R. § 61.145(b)(4)(vi). The amount of non-friable ACM reported on a notification of renovation activity is thus not an admission of the amount of ACM, but is persuasive on the issue here of whether the roofing material contained ACM. Considered together with the other evidence in the record, Complainant has shown that the roof of Building 1540 contained ACM.

Respondent has not rebutted Complainant's case with any evidence that a certain identifiable area of the roof did not contain Category I ACM. If Respondent had doubts that the entire roof contained ACM, then it should have either tested the roofing material for asbestos, or followed the notification and asbestos emission control requirements of 40 C.F.R. § 60.145(b) and (c). 40 C.F.R. part 61 subpart M appendix A, section 1.A.3. Respondent did not offer into evidence any results of testing the roofing material for asbestos.

Thus, taken as a whole, a preponderance of the evidence shows that several different areas of the roof of Building 1540 contained Category I ACM, and does not show that there is any

discrete area of the roof which did not contain any Category I ACM. Therefore, the entire roof area of Building 1540 is deemed to contain Category I ACM.

B. Whether the chain of custody for the samples taken at the inspection was adequate

Instead, Respondent challenges Complainant's evidence, namely the Fiberquant sampling results, with the argument that EPA did not produce a complete chain of custody for those samples, because the chain of custody document in evidence does not include the signature of the person who transported the samples from PDEQ to Fiberquant and the signature of the analyst. Respondent also argues that there is no testimony as to who performed the laboratory analysis or how it was performed. Respondent's Post-Hearing Brief at 3-4.

Included in Complainant's exhibits is a Chain of Custody Record with signatures, dates and times written in all of the spaces provided, and a Federal Express airbill showing an overnight shipment on April 3, 1997 from Mr. Bonillas to Fiberquant. Ex. C-1, C-17. The signature of the analyst at Fiberquant, and the description of methodology for analysis of the samples, appear in the laboratory report. Ex. C-1. Respondent points to no authority, and none has been found, which requires on the chain of custody form the signatures of the particular analyst at the laboratory and the person who shipped the samples, in order to prove the integrity of the samples.

There is no suggestion in the record of this proceeding of any tampering or mishandling of samples by Fiberquant personnel or shipping personnel. There is no basis for finding the chain of custody for the samples taken by Mr. Bonillas to be deficient, or for finding the Fiberquant sampling results to be invalidated. Accordingly, Respondent's argument is rejected.

C. Whether any of the roofing material was RACM

The NESHAP requirements, including notification and asbestos emission control requirements, apply if a renovation project meets or exceeds the threshold amount of regulated ACM ("RACM"). Category I ACM is RACM if it has become friable or "will be or has been subjected to sanding, grinding, cutting or abrading." 40 C.F.R. § 61.141. The Asbestos NESHAP Interpretive Rule explains that use of "RB roof cutters or other equipment that sand, grind, cut or abrade the roof material" to remove Category I nonfriable ACM creates RACM. 40 C.F.R. part 61 subpart M appendix A. Thus the next question is whether a rotating blade ("RB") roof cutter, or equipment that similarly damages roofing material, was used to remove roofing material on Building 1540.

"RB roof cutter" is defined in the Asbestos NESHAP Interpretive Rule as "an engine powered roof cutting machine with one or more rotating cutting blades the edges of which are blunt." *Id.* Respondent does not dispute that it used an engine-powered machine with a rotating blade, but believes that the machine constituted "[e]quipment with blades having sharp or tapered edges, and/or which does not use a rotating blade" which "is used for 'slicing' rather than 'cutting' the roofing material," and which is described in parenthetical text in the Interpretive Rule as not included in the term "RB roof cutter." *Id.* at section 1.A.1.

The blade that Respondent asserts was used in removing the roof of Building 1540, Ex. R-3, is not as sharp as household scissors or a butter knife, but it had been sharpened to the extent that the edges are tapered. Thus, it would appear not to be part of an "RB roof cutter" as contemplated by the asbestos NESHAP Interpretive Rule. However, there is some ambiguity in the terms "cutting" and "slicing." The term "slicing" is not defined in the Asbestos NESHAP or its Interpretive Rule, but the term "cutting" is defined in 40 C.F.R. § 61.141 as "to penetrate with a *sharp-edged* instrument and includes sawing, but does not include shearing, slicing or punching" (emphasis added). Yet, the Interpretive Rule parenthetical text relied upon by Respondent suggests that equipment with a rotating blade is not considered an RB roof cutter if the blades have sharp or tapered edges. Thus, further analysis is necessary.

EPA guidance on the issue of "cutting" and "slicing" is found in an EPA guidance document, "Applicability of the Asbestos NESHAP to Asbestos Roofing Removal Operations," dated September 1994. Ex. C-4. That document describes an "RB roof cutter" and a "slicer." The RB roof cutter is described as having a blade mounted near or toward the front of the machine, typically about 12 inches long with two cutting edges, which are "blunt with about a 1/4 inch kerf," often carbide-tipped, so that it can be used on gravel-covered or smooth surfaced roofs, and which is usually housed in a metal blade guard "that confines the dust and minimizes the throwing of gravel." *Id.* at section 5.1.3. It is described further as having a three or four wheeled deck and as having a gasoline powered engine of typically 8 or 9 horsepower, and manually propelled. *Id.* The guidance document also describes a "modified RB roof cutter blade," in which the standard RB roof cutter blade is replaced with a thinner steel blade fabricated at a metal shop, with a blade width of about 1/8 inch, designed to reduce the amount of dust generated. *Id.* at section 6.1.1. The document states that, "[e]ven though the thinner blade produced less dust and cutting debris . . . , visible emissions and smoke were observed when it was used to cut a dry BUR membrane on a gravel-surfaced roof." *Id.*

The "slicer," on the other hand, is described in the guidance document as a self-propelled, two wheeled tractor, with a heavy metal plate attached at the rear, with weight placed on the blade to slide along the smooth roof membrane. Ex. C-4 at section 5.1.4. Attached near the rear of the plate is a blade extending downward. The blade is triangular so that as the blade is pulled through the membrane, the slicing edge is angled back, and "can slice through the membrane and insulation without producing visible emissions or dust or debris." The document notes that a slicer can be fabricated using commercially available components, such as by installing a roof cutter blade perpendicular to the roof surface on the front of a power remover. The guidance

document states that "[s]licing a roof membrane involves pulling a sharp or thin-edged blade through the membrane in a long continuous motion" and distinguishes the latter from a standard RB roof cutter, "which has a high-speed rotating blade that impacts the membrane repeatedly to cut a path through it." *Id.* at section 6.1.2. The document states further that "slicing produces no visible debris or dust." *Id.* A comparison of the machine used by Respondent with the machines described in the guidance document suggests that Respondent used an RB roof cutter rather than a slicer.

The guidance document appears to exclude machines with a rotating blade from the term "slicer," yet the Interpretive Rule does not. Consequently, and because the guidance document is not binding, the issue of whether Respondent used an "RB roof cutter" or equipment which sands, grinds, cuts, or abrades roofing material cannot be determined solely on the basis of the appearance of the blade and machine used by Respondent on the roof of Building 1540. The analysis of the issue thus turns on the evidence of the debris observed on the roof.

On the roof of Building 1540, Mr. Bonillas observed "saw debris . . . scattered throughout the cut area," which was "ground roofing material," "friable," in "small particles," "fine, ground up material" and "anywhere from a few millimeters in size," but that "wasn't fine powder." Tr. 26, 33-34, 36, 40. Mr. Bonillas' credibility and the accuracy of his descriptions have not been shown to be questionable.³ The photographs taken at the inspection show that a significant amount of such debris was generated. Ex. C-1. The exact size of the particles of debris cannot be gauged from the photographs, but the appearance of the debris in the photographs is consistent with Mr. Bonillas' description. Mr. Pyeatt's testimony that he observed "dust" being generated on the roof by Respondent's use of the rotating blade machine corroborates Mr. Bonillas' testimony that roofing debris was in small particles. Tr. 74, 80, 89. Complainant's evidence and testimony supports a finding that Respondent used an RB roof cutter "or other equipment that sand[s], grind[s], cut[s] or abrade[s] the roof material" to remove Category I ACM, within the meaning of appendix A of the Asbestos NESHAP.

This evidence and testimony is not contested by Respondent. Mr. Tancredi's observation that small particulate debris is generated even by manual methods of removal does not defeat Complainant's case. Tr. 239. The Asbestos NESHAP Interpretive Rule explains that it is the "damage to the roofing material, and the potential for fiber release" which is the basis for subjecting roof removal operations using RB roof cutters, or other equipment that sand, grind, cut or abrade the roof material to NESHAP requirements. 40 C.F.R. part 61 subpart M appendix A. Such damage and potential for fiber release is evidenced by the amount of debris generated and the size of the debris particles. There are no numerical values provided by the

³As the Environmental Appeals Board (EAB) has stated, "when an inspector trained to determine compliance with the applicable regulations reasonably determines that a violation has occurred and provides a rational basis for that determination, liability should follow absent proof that the inspector's testimony lacks credibility." *Norma J. Echevarria and Frank J. Echevarria d/b/a Echeco Environmental Services*, 5 E.A.D. 626, 640-41 (EAB 1994).

regulations as to amount of debris generated or particle size that would indicate such "damage" and "potential for fiber release," but the definition of "grinding" indicates that a renovation which uses equipment that grinds or chips ACM roofing material into "powder or small fragments" would be considered regulated under NESHAP. 40 C.F.R. § 61.141.

While the evidence does not establish that the roofing materials were reduced to powder, the record establishes that a significant amount of the roofing material was reduced to small fragments as contemplated by the regulatory definition of "grinding." It is concluded that Respondent's method of roof removal subjected Category I ACM to "sanding, grinding, cutting or abrading," rendering it RACM

D. Whether the amount of RACM rendered the project subject to regulation under the NESHAP

The asbestos NESHAP notification and emission control requirements apply only if the amount of RACM meets or exceeds the threshold amount, namely 160 square feet of RACM, or 5580 square feet of Category I nonfriable ACM roofing material that is removed with an RB roof cutter or equipment that similarly damages the roofing material. 40 C.F.R.§ 61.145(a)(4) and appendix A. As concluded above, the entire roof area of Building 1540 is deemed to contain Category I ACM, and equipment Respondent used to remove it subjected it to "sanding, grinding, cutting or abrading." The question is how many square feet of the roofing material was removed using that equipment.

The Inspection Report states Mr. Bonillas measured the area of the roof that was cut by the RB roof cutter as 7,476 square feet. Ex. C-1. Respondent did not offer any testimony or evidence challenging that evidence. It is concluded that Respondent removed more than 5580 square feet of Category I nonfriable ACM using an RB roof cutter or equipment that sanded, ground, cut or abraded the material, which is deemed by the Interpretive Rule to create more than 160 square feet of RACM. Thus, Respondent's renovation operation was subject to the notification and emission control (work practice) requirements of the asbestos NESHAP.

E. Whether Respondent failed to provide notification of renovation activities prior to renovation

The parties do not dispute that Respondent submitted to PDEQ a "NESHAP Notification for Renovation and Demolition Activities" (Notification), marked "Courtesy," prior to commencing asbestos removal activity. Ex. C-7. The postmark on Respondent's initial Notification is March 24, 1997. *Id.*, Tr. 44. The asbestos removal work commenced on or about March 26, 1997, and was observed to be in progress by Mr. Bonillas on March 31, 1997. Ex. C-7, C-1. The asbestos NESHAP requires notice of intention to renovate to be postmarked or delivered at least 10 working days before removal work or other activity begins. 40 C.F.R. § 61.145(b). There is no question that Respondent failed to comply with that requirement.

F. Whether Respondent failed to keep RACM adequately wet until collected for disposal

Respondent argues that Complainant has not carried its burden of proof to establish that Respondent failed to keep RACM adequately wet until collected for disposal. Respondent points out that Mr. Bonillas did not testify specifically that he sprayed each sample of roofing material with water to determine dryness, and that his Inspection Report states only that he sprayed the sample of brown insulation material and observed a color change indicating dryness. Respondent surmises that it was the only sample that could absorb water enough to show a color change, as it was the only one that was not asphalt or tar based material. Respondent asserts that photographs 4, 5, 18 and 19 taken by Mr. Bonillas at the inspection clearly show hoses on the roof, contrary to Mr. Bonillas' and Mr. Pyeatt's testimony that they did not see a hose on the roof. Tr. 32-33, 89. Offering into evidence an Airborne Fiber Concentration Analysis report, Respondent asserts that air sampling reports conducted at Building 1540 on March 31, 1997, show results below EPA thresholds for schools, *i.e.*, less than 0.01 fiber per cubic centimeter. Ex. R-6.

The testimony of a compliance inspector regarding personal observations is sufficient to establish whether RACM has been adequately wetted. Ocean State Asbestos Removal, Inc./Ocean State Building Wrecking and Asbestos Removal Co., Inc., 7 E.A.D. 522, 1998 EPA App. LEXIS 82 * 22 (EAB, March 13, 1998); Echevarria, 5 E.A.D. at 639 (EAB 1994); U.S. v. MPM Contractors, Inc. 767 F.Supp. 231, 233-234 (D. Kan. 1990) ("In cases involving alleged violations of the NESHAP for asbestos, courts have routinely relied on the observations of inspectors to determine whether asbestos was adequately wetted."). Mr. Bonillas stated in his Inspection Report that he observed "dry saw debris scattered throughout the cut area," and describes the material in each of the seven samples as "dry." Ex. C-1. At the hearing, Mr. Bonillas testified that the roofing debris that he observed on the roof was dry. Tr. 24. Respondent did not produce any testimony or evidence that challenges Mr. Bonillas' testimony or calls his credibility into question. There is no particular method required in the regulations as to how an inspector determines whether RACM is adequately wet. The fact that a hose may have been on the roof at the time of the inspection does not establish that the hose was in fact used to keep the roofing material adequately wet until collected for disposal. The air sampling results produced by Respondent also do not establish that the material was kept adequately wet. See, Allegheny Power Service Corp., Docket No. CAA-III-067, slip op. at 12 (ALJ, December 14, 1999); Schoolcraft Construction, Inc., CAA Appeal No. 98-3, 1999 EPA App. LEXIS 22 at * 27 (EAB, July 7, 1999) ("The absence of asbestos particles in . . . air samples cannot conclusively show whether the RACM was adequately wet 'to prevent' the release of asbestos').

Complainant has established that RACM on the roof of Building 1540 was not kept adequately wet. Accordingly, it is concluded that Respondent has violated section 61.145(c)(6)(i) of the asbestos NESHAP by failing to keep the RACM wet until it was collected and contained for disposal.

PENALTY

Civil penalties can be imposed against violators of the Clean Air Act under section 113(d). Penalties of up to \$25,000 per day of violation may be assessed against any person found to have violated the Act. 42 U.S.C. § 7413(d)(1)(B). Several factors can be taken into consideration in developing an appropriate penalty: "the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence, . . . payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, the seriousness of the violation" and any other factor which justice may require. 42 U.S.C. § 7413(e)(1). The Clean Air Act Stationary Source Civil Penalty Policy provides guidelines for the assessment of penalties under the Clean Air Act and can be described as consisting of two sections: (1) general provisions applicable to any violation of the Clean Air Act ("General Penalty Policy") and (2) appendices which provide specific guidance for the assessment of penalties for specific categories of Clean Air Act violations. Appendix III of the Clean Air Act Stationary Source Penalty Policy") and is applicable to cases involving NESHAP violations.

Part 22 of EPA's regulations, 40 C.F.R. part 22, directs the Presiding Judge to consider the Agency's penalty policies.⁴ A Presiding Judge may deviate from the Penalty Policy after considering these guidelines,⁵ if the decision to do so is supported by adequate reasoning and evidence in the initial decision. In this case, the record supports the use of the Clean Air Act Stationary Source Civil Penalty Policy and the Asbestos Penalty Policy as a basis for determining the penalty amount.

Complainant has proposed that the Respondent should be assessed a total penalty of \$34,280, under those Policies. The total proposed penalty is composed of penalties of \$4,280 to reflect the economic benefit to Respondent of its non-compliance, \$15,000 to reflect the gravity of failing to submit written notice of intention to renovate, \$5,000 to reflect the gravity of failing to keep RACM adequately wet until collected for disposal, and \$10,000 to reflect the size of Respondent's business. Tr. 141.

As to the failure to submit the required notice of intention to renovate, the Asbestos Penalty Policy includes a table of penalty assessments for various types of notification violations.

⁴ The Regulations provide that the Presiding Officer not only "shall determine the amount of the recommended civil penalty based on the evidence in the record and in accordance with any penalty criteria set forth in the Act" but also "shall consider any civil penalty guidelines issued under the Act." 40 C.F.R. § 22.27(b).

⁵ In re Employers Insurance of Wausau and Group Eight Technology, Inc., TSCA Appeal No. 95-6, 6 E.A.D. 735 (EAB, Feb. 11, 1997).

Ex. C-2 app. III at 15. The table lists a penalty of \$15,000 for failure to provide notification or for notice submitted after asbestos removal is completed, where substantive violations (such as work practice violations) occurred. The table lists a penalty of \$2,000 for notice submitted while asbestos removal is in progress, or for failure to update notice when the amount of asbestos changes by at least 20%. A penalty of \$500 is listed for situations where the amount of asbestos in the notice is missing, improperly dimensioned, or for multiple facilities. The table lists a penalty of \$200 for notice that lacks any other required information, or where notice is submitted late, but still prior to the asbestos removal starting date. *Id.* The Asbestos Penalty Policy provides that in situations where notification is late, incomplete or inaccurate, "[t]he important factor is the impact the company's action has on the Agency's ability to monitor substantive compliance." Ex. C-2 app. III at 2. The dollar figures for each notice violation are to be added. *Id.* at 15.

Robert Trotter, EPA Region IX asbestos NESHAP case developer, testified as to the calculation of the proposed penalty. He testified that where no notification is provided, "there's no opportunity for EPA or any local delegated inspector to go out and see if the job is being compliant or not." Tr. 143. The notification submitted by Respondent having been marked "Courtesy," Mr. Trotter considered it not to be a notification, explaining at the hearing as follows:

We talked about courtesies when the rule came out originally in the early nineties. A lot of the abatement contractors wanted to provide courtesy notifications because it was part of their bid requirements to provide the notification. We sent out information to the contractors that a courtesy notification means that the job is not regulated and doesn't really give any type of protection to a company that it is a regulated job. We made the determination back there that the courtesy regulation [sic] tells the EPA that it is not going to be a regulated material. So they are not notifying on an asbestos regulated material.

[W]hen the representatives from the company write "courtesy" on it, they are saying that this is not a regulated material and the notification itself, in this particular case, reflected that. By the type of work practices that were involved, by maintaining on the notification that it was a nonfriable material and by not listing that they were going to use such methods to make the material friable such as a mechanical cut. Tr. 151-152. There is no reference to "courtesy" notifications in the asbestos NESHAP, the Interpretive Rule, or the Penalty Policy. Complainant has not proffered into evidence any such "information" that Mr. Trotter said was sent out to contractors.

Respondent's initial Notification was postmarked on March 24, 1997, the day prior to the date on which asbestos removal commenced, and was delivered on March 26, 1997. Ex. C-7, J-1. Under the Asbestos Penalty Policy, a notice submitted late, but still prior to the asbestos removal starting date, warrants a \$200 penalty. Ex. C-2 app. III at 15. Mr. Bonillas was able to, and did, monitor Respondent's substantive compliance during its asbestos removal project upon receiving Respondent's Notification, albeit the inspection was precipitated by a complaint from Mr. Pyeatt. This fact weighs against treating Respondent's initial Notification as a failure to submit <u>any</u> notice.

The delay in submitting the initial Notification was not the only flaw, however. Respondent failed to include a certification by an AHERA certified building inspector. Ex. C-7; Tr. 29. Although this omission was corrected in the subsequent revised Notification, Respondent's initial Notification "lacks other required information," warranting a \$200 penalty under the Asbestos Penalty Policy. Ex. C-2, app. III at 15.

An additional flaw in the initial Notification is that Respondent did not report in its initial Notification that it would be using power tools for asbestos removal, and that it would be generating RACM from roof removal activities.⁶ Mr. Goodballet testified that Respondent initially used hand tools, but then used the RB roof cutter in order for the operation to proceed faster, which may suggest that Respondent did not initially plan to use the RB roof cutter.⁷ Tr. 111-112, 128. However, the Asbestos NESHAP requires that notification "must be updated as necessary." 40 C.F.R. §61.145(b)(2); 40 C.F.R. part 61 subpart M appendix A. Thus, at the time when Respondent decided to use the RB roof cutter, and prior to its use, Respondent was obligated immediately to update its Notification to report such use. Although the time of that decision is not apparent from the record, it is undisputed that Respondent did not update its Notification until after it began using the RB roof cutter and after the inspection. Ex. C-7, C-1. Such failure on the part of Respondent to update its initial Notification to report the use of the RB roof cutter and generation of RACM is analogous to "failure to update notice when the amount of asbestos changes by at least 20%," warranting a \$2,000 penalty under the Asbestos Penalty Policy.

⁶ Respondent reported on the initial Notification that it would be removing or generating 12 linear feet of RACM from pipes. Ex. C-7.

⁷ It is observed that Respondent's revised Asbestos Abatement Plan for the project states that roofing will be cut into squares "using a roofing saw that if [sic] equipped with a rotating blade"; however, the revised Plan is not dated and the record does not establish the date on which the revised Plan was prepared. Ex. C-6 at 2.

In Mr. Trotter's opinion, Respondent's submissions of both the initial and revised Notifications were tantamount to no notification. He testified that "the project really wasn't notified" because "in effect, there was no notification made until the violations were found," when the inspector observed the violations, "and at that point they [Respondent] changed their work practices and submitted another notification at the request of the County" Tr. 153-154. While Mr. Trotter's testimony reflects the fact that notification submitted after inspection may be of little use to EPA or the state agency, such notification suggests good faith efforts to comply, which is required to be considered in assessing a civil administrative penalty under Section 113(d) of the Act. Furthermore, neither the Asbestos NESHAP nor the Asbestos Penalty Policy provides support to Mr. Trotter's opinion. The Asbestos Penalty Policy does not refer to notices or updates submitted after an inspection, but provides that notice after completion of asbestos removal is tantamount to no notice. There is no evidence that the revised Notification was submitted after Respondent's asbestos removal was completed. Finally, the General (Clean Air Act Stationary Source) Penalty Policy provides that the gravity component of a penalty may be mitigated (up to 30%) where a respondent "makes extraordinary efforts to . . . come into compliance after learning of a violation." Ex. C-2 at 17. It is undisputed that Respondent submitted a proper Notification immediately or very shortly after the inspection. Ex. C-1, C-7. Respondent's prompt submittal of the revised Notification after the inspection warrants a slight mitigation of the gravity component of the penalty for Count I.

Accordingly, considering all of the facts in evidence, a penalty reflecting the gravity of Count I is \$2,160, consisting of a \$200 penalty for submitting the initial Notification late, a \$200 penalty for failure to include the certification by a building inspector, a \$2000 penalty for failure to submit, prior to using the RB roof cutter, an updated Notification to report the RACM to be generated and use of a power tool, and a reduction of ten percent for Respondent's prompt submittal of the revised Notification after the inspection.

Respondent's failure to keep RACM adequately wet until collected for disposal is a work practice violation. Because asbestos is a very hazardous material, violations such as the failure to adhere to work practice requirements are assessed a very high gravity factor. Ex. C-2, app. III, Asbestos Penalty Policy at 2. Respondent cut approximately 9,828 square feet of the roof, and removed approximately 7,476 square feet of Category I nonfriable ACM with an RB roof cutter. Ex. C-1. Removal of 5,580 square feet of such material with such equipment creates 160 square feet of RACM under EPA's Interpretive Rule. 40 C.F.R. part 61 subpart M appendix A. The Asbestos Penalty Policy addresses the quantity of asbestos in "units" rather than in linear or square feet; a "unit" being equal to 260 linear or square feet. For an operation involving a total amount of up to 10 units of asbestos, the Gravity Component Matrix in the Asbestos Penalty Policy provides that for a work practice violation a penalty of \$5,000 is appropriate. Ex. C-2 app. III at 17. Since Respondent has committed a work practice violation of failing to keep RACM wet until collected for disposal, and the project involved less than 10 units of asbestos, Respondent is assessed \$5,000 for the gravity component of the violation described in Count I of the Complaint.

The Asbestos Penalty Policy provides that the gravity component for violations of the Clean Air Act can be increased in proportion to the size of the violator's business. Ex. C-2 app. III at 6.⁸ The General (Clean Air Act Stationary Source) Penalty Policy indicates that corporations with a net worth of between \$1 million and \$5 million should be assessed an additional \$10,000 penalty. Ex. C-2 at 14. In accordance with this rationale, Complainant has proposed that an additional \$10,000 amount should be imposed to reflect Respondent's business size as reflected by information in its Dun and Bradstreet report. More specifically, Complainant's witness Mr. Trotter noted that a Dun and Bradstreet report, dated September 4, 1997, shows that Respondent had a net worth of \$2 million. Tr. 144; Ex. C-9. Respondent, on the other hand, asserts that it has a negative net worth.

Mr. Paul Jalbert, an auditor with EPA Region IX Office of the Inspector General, also testified on behalf of Complainant in regard to the size of Respondent's business. He testified he reviewed Respondent's federal income tax returns and financial statements, and the Dun and Bradstreet report. Tr. 173. Upon review of a financial statement for LVI Environmental Services Group, Inc. and Subsidiaries, for 1996 and 1997, prepared by Deloitte and Touche LLP, he found that LVI's Oklahoma subsidiary (Respondent) had no stockholder's equity, no common stock issuance, and no additional paid-in capital. Tr. 174; Ex. C-11 at 13. However, he observed a figure of approximately \$2.9 million listed on the balance sheet as "Due from parent, net" under "stockholder's equity" for the Respondent. Ex. C-11 at 13. He interpreted that figure as money owed to that subsidiary from the parent, tantamount to equity. Tr. 174, 176. He explained that Respondent "would not meet the test of an ongoing concern without that parental financial support," and "wouldn't survive in a normal competitive business environment." Tr. 175-176. He suggested the possibility of additional paid-in capital invested in the subsidiary, and not owed back to the parent, where the subsidiary has millions of dollars of sales but no equity. Tr. 184. At the hearing, Mr. Jalbert did not remember whether Respondent's federal income tax returns indicated that Respondent had a negative net worth, and Complainant did not offer the tax returns into evidence. Tr. 185-186.

Respondent offered into evidence a financial statement for LVI Environmental Services Group, Inc. and Subsidiaries, for 1997 and 1998, prepared by Deloitte and Touche LLP. Ex. R-5. Respondent's witness Mr. John D. Maddox, audit director at Deloitte and Touche,⁹ testified that the net worth of Respondent as of December 31, 1997 was a deficit of \$332,236. Tr. 199, 200; Ex R-5 at 21. He testified that the figure of approximately \$2.9 million was due to

⁸The General Penalty Policy provides that a corporation's size is indicated by its stockholder's equity, or net worth. Ex. C-2 at 10. It further provides that where a company has more than one facility, the size of the violator is detained based on the company's entire operation, not just the violating facility, and with regard to parent and subsidiary corporations, only the size of the entity sued should be considered. Ex. C-2 at 15.

⁹ There is no testimony or evidence that Mr. Maddox prepared the financial statements in evidence.

Respondent's parent company rather than due from the parent company, LVI Services, Inc. *Id.* He explained that an amount "due from" a parent would be indicated as a negative number by bracketing the number, so that "a bracketed amount without a bracket would be due to a parent." Tr. 200. He explained further that "Generally accepted accounting principles would indicate that an amount due from the parent in circumstances where the parent may not have the intent or the ability to pay that amount, should be classified as an offset against equity . . . as if it was presented as a dividend." Tr. 200-201. According to the Deloitte and Touche financial statement listing of Respondent's retained earnings, and Mr. Maddox's testimony, the net worth of Respondent on December 31, 1998 was a deficit of \$1,029,676. Tr. 202; Ex. R-5 at 15.

Under the General Penalty Policy, if a corporation has a net worth of under \$100,000, then the penalty is increased by \$2,000. The question presented is whether to credit Mr. Maddox's testimony that Respondent has a negative net worth, and increase the penalty by \$2000, or to rely on the Dun and Bradstreet Report, follow Mr. Jalbert's interpretation of the \$2.9 million "due from parent" as Respondent's equity, and increase the penalty by \$10,000 as proposed by Complainant. The burden is on Complainant to prove that the relief sought, including each component of the penalty it proposes, is appropriate. 40 C.F.R. § 22.24(a). Upon Complainant's establishment of a prima facie case, the Respondent has the burden of presenting any response or evidence with respect to the appropriate relief. *Id.* Each matter of controversy must be decided on a preponderance of the evidence. 40 C.F.R. § 22.24(b).

Complainant has presented evidence to establish prima facie that Respondent's net worth is between \$1 million and \$5 million, relying primarily on the Dun and Bradstreet report and Mr. Jalbert's suggestion that the \$2.9 million was an investment in Respondent that was not owed back to the parent. Complainant's Post Hearing Brief at 32-34. However, Mr. Maddox's testimony that Respondent had a negative net worth was persuasive and was not substantially challenged by Complainant. Complainant merely commented that Dun and Bradstreet reports are generally accepted by the financial community, are based on records provided by the company, and that Respondent did not bother to correct the report if it was wrong. *Id.* A preponderance of the evidence shows that Respondent had a negative net worth at the time relevant to assessment of a penalty. Accordingly, an increase of \$2,000 will be assessed against the Respondent, to represent the size of Respondent's business.

The Asbestos Penalty Policy also provides for an economic benefit penalty component, ("Benefit Component") for work practice violations. The Asbestos Penalty Policy explains the benefit component is a measure of the economic benefit accruing to the contractor as a result of noncompliance with the asbestos regulations, and suggests that information on actual economic benefit should be used if available, or a comparison of the operator's actual expenses with the contract price. Ex. C-2 app. III at 6-7. In the absence of reliable information, the "rule of thumb" provided in the Policy is \$20 per linear or square foot of asbestos. *Id.* at 7, 17. Mr. Trotter's testimony indicates that he calculated approximately 7,500 square feet of disturbed roofing material to be the equivalent of 214 square feet of RACM, based on the calculation in the Interpretive Rule of 5580 square feet of Category I ACM cut with an RB roof cutter yielding

approximately 160 square feet of RACM.. Tr. 145-146. The 214 square feet of RACM multiplied by \$20 per square foot yields the proposed economic benefit component of \$4280, as calculated by Mr. Trotter. *Id*.

Mr. Trotter conceded that the issue of whether a company earned or lost money on the asbestos removal project "can be a consideration" in calculating a penalty. Tr. 154. Mr. Tancredi testified that he did not see any economic benefit derived from anything done on the project, and that Respondent "lost several thousand dollars on the project." Tr. 272. In its Answer to the Complaint, Respondent explained that it lost the money due to "Pima County's direction to stand idle, encapsulate non-friable roofing, dispose of Category I non-friable roofing as friable RACM, and dispose of non-ACM as ACM." Answer at 4.

The evidence does not support a finding that Respondent gained any economic benefit from failing to keep the RACM adequately wet. The evidence suggests that Respondent had equipment at the site which would enable it to wet the RACM and keep it wet. The RB roof cutter had a connection for misting the blade and roof material with water. Tr. 117-118; Ex. C-1. Mr. Bonillas' Inspection Report states that Eric Bowers indicated that two garden hoses were being used on the roof for wetting the waste debris. Ex. C-1. Mr. Pyeatt admitted that at least at some point during Respondent's renovation work, he observed water coming from the roof. Tr. 90. Any savings Respondent could have realized of costs to compensate its employees for their time spent keeping the RACM adequately wet until collected for disposal would be de minimis. Consequently, the penalty assessed will not include an economic benefit component.

Respondent has not raised the issue or come forward with any evidence that the payment of the penalties will have a detrimental effect on its ability to continue in businesses. Thus, the penalty will not be adjusted downward based on this factor. The penalty will also not be increased any further on the basis of any other of the adjustment factors described in the General and Asbestos Penalty Policies because the Complainant has not requested such an adjustment and there is nothing on the record to indicate that such an adjustment is warranted.

In sum, Respondent will be assessed a penalty of \$2,160 for the gravity of the violation in Count I, \$5000 for the gravity of the violation alleged in Count II, and \$2000 to reflect the size of Respondent's business, for a total penalty of \$9,160. The penalty amount of \$9,160 is consistent with the Clean Air Act and with the applicable penalty policies, and will be assessed against the Respondent in this matter for the violations found herein.

ORDER

1. A civil penalty in the amount of \$ 9,160 is assessed against Respondent LVI Environmental Services, Inc.

2. Payment of the full amount of the civil penalty assessed shall be made within thirty (30) days after this Initial Decision becomes a final order under 40 C.F.R. § 22.27(c), as provided in paragraph 5 below. Payment shall be submitted by a certified check or cashier's check in the amount of \$9,160 payable to Treasurer, United States of America, and mailed to:

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

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

4. Failure upon the part of Respondent to pay the penalty within the prescribed statutory frame after entry of the final order may result in the assessment of interest on the civil penalties. 31 U.S.C. § 3717; 40 C.F.R. § 13.11.

5. Pursuant to 40 C.F.R. § 22.27(c), this Initial Decision shall become a final order fortyfive (45) days after its service upon the parties and without further proceedings unless (1) a party moves to reopen the hearing within twenty (20) days after service of the Initial Decision, pursuant to 40 C.F.R. § 22.28(a); (2) an appeal to the EAB is taken from it by a party to this proceeding, pursuant to 40 C.F.R. § 22.30(a), within thirty (30) days after the Initial Decision is served upon the parties; or (3) the EAB elects, upon its own initiative, under 40 C.F.R. § 22.30(b), to review the Initial Decision.

> Charles E. Bullock Administrative Law Judge

IN THE MATTER OF LVI ENVIRONMENTAL SERVICES, INC., Respondent Docket No. CAA-09-97-10

CERTIFICATE OF SERVICE

I certify that the foregoing <u>Initial Decision</u>, dated June 28, 2000, was sent in the following manner to the addressees listed below:

Electronic copies of Administrative Law Judges' decisions and orders may be obtained on the Internet at http://www.epa.gov/oalj/orders.htm.

Certified Mail, Return Receipt Requested

Original and Copy to:	Ms. Danielle E. Carr
	Regional Hearing Clerk
	U.S. Environmental Protection
	Agency, Region IX (ORC-1)
	75 Hawthorne Street
	San Francisco, CA 94105-3901

Copy to:

Counsel for Complainant:	Carol Bussey, Esquire Office of Regional Counsel U.S. Environmental Protection Agency, Region IX 75 Hawthorne Street
	San Francisco, CA 94105

Counsel for Respondent: LVI Environmental Services, Inc. 470 Park Avenue South 11th Floor - North Wing New York, NY 10016

> Marion Walzel Legal Assistant

Dated: June 28, 2000