

ALASKA LEGISLATURE COMMITTEE FILES 1987-1988 8672

4569 HHS HB 440 (FILE 3) - HB 463

7. Community Awareness Efforts. Seventy-six percent of the agencies cited at least one method by which women and men in the community become aware that infertility services are available (see Table A-11). Referral from other clients, a method requiring no effort on the part of the agency, was the most commonly cited means (57 percent). Less common were specific publicity efforts made by the agencies: 36 percent gave talks or presentations about their infertility services; 12 percent placed specially developed brochures and posters in other agencies about the availability of these services, and 8 percent of the agencies had notices about these services in newspapers and magazines. Some agencies noted that infertility patients were referred to them from other providers: 31 percent received agency referrals and 21 percent received referrals from private physicians.

Table A-1: Percentage of Family Planning Agencies That Provide Infertility Services (Other than Counseling) by Agency Type, Metropolitan Status and Region

Location	Total	Agency Type			
		Hospital	Health Department	Planned Parenthood	Other
Unweighted N	508	130	108	135	135
<u>Total</u>	70%	78%	66%	72%	76%
<u>Metropolitan Status</u>					
Metropolitan	74	79	69	70	79
Nonmetropolitan	66	77	65	85	71
<u>Region</u>					
Northeast	80*	77	50	74	92*
Northcentral	74	92	69	79	72
South	63	65	64	61	58
West	79	80	79	71	81
Estimated number of providing agencies	1712	212	935	127	437

* Statistically significant difference between regions (p < .05).

Table A-2: Percentage of Family Planning Agencies Providing Specific Infertility Tests and Procedures, Grouped by Level, According to Agency Type and Region

Tests and Procedures	Total	Agency Type				Region			
		Hospital	Health Department	Planned Parenthood Affiliate	Other	North-east	North-central	South	West
Unweighted N	508	130	108	135	135	138	116	149	105
Level I									
o Includes:									
- counseling, education, information	64%	80%	59%	69%	70%	80%	77%	55%	70%
- physical exam, women	61	76	57	56	66	69	67	58	58
- basal body temperature instruction	61	75	52	68	72	78	67	51	73
- infection investigation	52	68	46	49	58	62	59	43	62
- physical exam, men	26	47	18	16	41	45	32	19	29
o Percentage that provide at least one Level I procedure*	77	83	74	78	81	87	83	71	83
o Percentage that provide all five Level I procedures	19	43	10	10	33	36	27	12	22
Level II									
o Includes:									
- semen analysis	17	53	8	18	23	34	18	11	24
- post coital test	15	51	8	12	16	29	13	11	17
- endometrial biopsy	15	57	5	8	23	32	14	10	19
o Percentage that provide at least one Level II procedure	24	60	15	22	32	37	22	19	31
o Percentage that provide all three Level II procedures	9	44	1	5	12	25	8	4	11

(cont.)

Table A-2 (cont.)

Tests and Procedures	Agency Type					Region			
	Total	Hospital	Health Department	Planned Parenthood Affiliate	Other	North-east	North-central	South	West
Level III									
o Includes:									
- genetic counseling, screening	31	52	32	12	24	34	23	36	24
- sonography	15	56	8	5	17	32	12	12	15
- clomiphene (medical drug therapy)	15	51	7	7	17	30	15	10	16
- laparoscopy	13	55	5	5	14	29	12	20	11
- gonadotropin (hormone treatment)	12	44	5	5	15	26	10	8	14
- hysterosalpingogram	12	53	3	5	15	29	12	7	12
- female micro-surgery	10	46	4	2	10	26	7	8	8
- sperm antibody test	9	39	3	2	13	21	10	6	11
- varicocelelectomy	8	33	2	2	11	21	7	4	8
- artificial insemination, by donor	6	27	2	2	7	16	5	4	5
- Male tubal reconstructive surgery	5	26	1	1	6	16	5	2	6
o Percentage that provide at least on level III procedure	37	62	36	19	32	41	31	39	33
o Percentage that provide all 11 Level III procedures	3	15	0	0	4	10	4	1	1

Note: The three levels used to group procedures are based on the Title X gradations or procedures for family planning agencies. The agency types differ significantly ($p < .05$) on all tests and procedures. The regions differ significantly on all tests and procedures except infection investigation and genetic counseling/screening.

* Counseling is counted here as a Level I procedure, and therefore these percentages are higher than those shown in Table A-1.

Table A-3: Percentage of Agencies Mentioning Specific Reasons for Not Providing Some or All Infertility Services and Referral Policy, by Whether these Agencies Provide Infertility Services, Type of Agency, Region and Metropolitan Area

Reason	Total	Infertility Services Provided		Agency Type				Region				Metropolitan Status	
		None or Counseling Only	Other	Hosp.	Hith. depts.	Planned Parent-hood	Other	North east	North central	South	West	Metro	Non metro
Unweighted N	503	230	373	128	105	135	135	136	116	146	105	153	350
o Lack appropriately trained staff	77	74	78	46 ^a	85	72	74	62 ^a	61	86	77	69 ^a	86
o Too costly an inconvenient to provide the services	67	62	70	40 ^a	74	66	66	56 ^a	76	67	68	62 ^a	73
o Lack of lab facilities	64	61	65	28 ^a	81	37	47	43 ^a	57	74	56	51 ^a	77
o Too little demand for the services	57	60	55	39 ^a	62	40	58	47 ^a	67	62	42	51 ^a	62
o Other medical providers in the area offer the services	56	49	59	55 ^a	52	76	57	63	59	50	63	63 ^a	48
o Other ^{a*}	7	7	7	16 ^a	6	7	6	11	8	6	6	7	7
Percentage that will refer patients elsewhere	92	84	95	90 ^a	89	100	96	96	97	86	99	94	89

Notes: Agencies could list more than one reason, so percentages do not sum to 100 percent.

^{a*} Other reasons include: lack of funding or government reimbursement; patients are unable to afford services; inappropriate patient population; do not serve males; legal or malpractice problems.

^a Statistically significant difference between agency types, regions or metropolitan status categories ($p < .05$)

Table A-4: For Referring Agencies, Percentage Distribution of Facilities to Which Female Patients are Referred for Each Kind of Service, According to Agency and Provider Type

Service and Where Referred	Total	Agency Type				Infertility Services Provided	
		Hospital	Health Post.	Planned Parenthood	Other	None or Counseling Only	Other
o Counseling							
Unweighted N	341	76	74	100	91	7	234
- clinics within the agency	11%	27%	8%	12%	10%	5%	14%
- private physician	49	26	51	63	51	56	46
- infertility treatment center	20	17	23	23	13	17	22
- hospital	26	34	21	36	24	19	27
- other	13	8	13	15	13	16	11
- do not refer for this service	4	10	3	1	6	2	5
o Exam							
Unweighted N	344	68	76	108	92	106	238
- clinics within the agency	8%	21%	7%	8%	7%	2%	11%
- private physician	55	31	55	73	55	55	55
- infertility treatment center	20	12	23	26	15	18	22
- hospital	24	38	20	32	26	21	27
- other	11	9	11	8	12	15	9
- do not refer for this service	2	10	0	1	6	2	2
o Preliminary tests							
Unweighted N	389	72	86	125	106	104	285
- clinics within the agency	6%	18%	4%	4%	6%	4%	6%
- private physician	56	35	56	74	56	50	58
- infertility treatment center	21	16	20	30	20	18	22
- hospital	29	47	24	34	34	23	31
- other	12	7	13	9	11	15	11
- do not refer for this service	3	6	2	1	5	5	3
o Specialized tests, procedures							
Unweighted N	426	98	84	129	115	102	324
- clinics within the agency	6%	19%	4%	3%	5%	5%	6%
- private physician	54	38	50	78	61	46	57
- infertility treatment center	24	24	22	32	27	18	27
- hospital	31	42	24	40	37	24	33
- other	11	10	12	8	11	16	9
- do not refer for							

Table A-5: For Referring Agencies, Percentage Distribution of Facilities to Which Male Patients are Referred for Each Kind of Service, According to Agency and Provider Type

Service and Where Referred	Total	Agency Type				Infertility Services Provided	
		Hospital	Health Dept.	Planned Parenthood	Other	None or Counseling only	Other
o Counseling							
Unweighted N	341	76	74	100	91	107	234
- clinics within the agency	11%	27%	8%	12%	10%	5%	14%
- private physician	49	26	51	63	51	56	46
- infertility treatment center	20	17	23	23	13	17	22
- hospital	24	34	21	36	24	19	27
- other	13	8	13	15	13	16	11
- do not refer for this service	4	10	3	1	6	2	5
o Exam							
Unweighted N	346	68	76	108	92	106	238
- clinics within the agency	8%	21%	7%	8%	7%	2%	11%
- private physicians	55	31	55	73	55	55	55
- infertility treatment center	29	12	23	26	15	18	22
- hospital	24	38	20	32	26	21	26
- other	11	9	11	8	12	15	9
- do not refer for this service	2	10	0	1	6	2	2
o Preliminary tests							
Unweighted N	389	72	86	125	106	104	285
- clinics within the agency	6%	18%	4%	4%	6%	4%	6%
- private physicians	56	35	56	74	56	50	58
- infertility treatment center	21	16	20	30	20	18	22
- hospital	29	47	24	34	34	23	31
- other	12	7	13	9	11	15	11
- do not refer for this service	3	6	2	1	5	5	3
o Specialized Tests and Procedures							
Unweighted N	426	98	84	129	115	102	324
- clinics within the agency	6%	19%	4%	3%	5%	5%	6%
- private physicians	54	38	50	78	61	46	57
- infertility treatment center	24	24	22	32	27	18	27
- hospital	31	42	24	40	37	24	33
- other	11	10	12	8	11	16	9
- do not refer for this service	4	4	5	1	4	5	4

Table A-6: Restrictions Imposed by Agencies Providing Infertility Services (Other than Counseling)

Restrictions	Percentage Of Providers
Unweighted N	261
o Has at least one Restriction	44%
o Type of Restrictions	
- serve only those seeking to become pregnant	25
- require agency approval for specialized services	10
- provide for couples only	5
- patient must be of minimum age (average 18 years)	5
- provide for primary infertility only	3
- patient must not be over maximum age (average 40 years)	2
- other restrictions	6

Notes: Agencies could check more than one restriction, so restrictions do not sum to 100 percent.

Other restrictions include: the couple must have tried for at least a year; serve only established patients.

Table A-7: Size of Family Planning Agencies' Infertility Patient Caseload for Selected Procedures for Female and Male Patients

Type of patients	Unweighted			
	N	Average	Range	Median
<u>Female Infertility Patients</u>				
o Total	138	40	1-1000	9
o Counseling	138	37	1-1000	8
o Exam	122	35	1-750	7
o Preliminary tests	32	102	1-900	25
o Specialized tests	32	32	1-200	15
<u>Male Infertility Patients</u>				
o Total	47	38	1-1000	5
o Counseling	45	13	1-325	5
o Exam	23	19	1-325	5
o Preliminary tests	30	25	1-250	10
o Specialized tests	6	4	1-10	3
<u>Total Family Planning Patients</u>				
o Female patients	331	3060	8-80,090	975
o Male patients	388	25	0-1960	0

Table A-8: Of Infertility Service Providers and of all Agencies, Percent Which Use Each Funding Source for Infertility Services

Funding Source	Agencies Providing Infertility Services Other than Counseling	All Agencies
Unweighted N	264	411
Percent of agencies with more than one funding source	94%	59%
Average number of sources of funding for infertility services	3	NA
o Patient fees	81%	57%
o Medicaid, Title XIX	73	51
o Title X	56	39
o State and local funding	35	25
o Social Services Block Grant	22	15
o MCH, Block Grant	17	12
o Special Title X initiative	7	5
o Other Sources	11	8

NA = not applicable.

Note: Other sources include: Indian Health Service funds; private donations; foundation grants.

Table A-9: Financial Policies for Infertility Services

Financial Policy	Agencies Providing Infertility Services Other than Counseling	All Agencies
Unweighted N	148-255	
o Percent which provide service and accept Medicaid		
- Counseling	62%	43%
- Exam	73	52
- Preliminary tests	21	15
- Specialized diagnostic procedures	15	11
- Medical drug therapy	15	11
- Surgical procedures	15	11
o Very fees for low income patients or serve without charge	73	51
o Accept insurance reimbursement as payment in full	8	6
o Percentage of agencies, at least 50 percent of whose patient population is the following:		
- Medicaid	15	11
- Reduced-fee	17	12
- Free	31	22
- Free, reduced-fee, or Medicaid	83	61
- Full-fee	17	12

Table A-10: Charges for Selected Infertility Procedures and Tests,
Family Planning Agencies

Charge	Average	Range	Median
o Initial visit (Unweighted N = 173)	\$ 49.25	\$5 - 125	\$ 44.82
o Post coital test (Unweighted N = 40)	41.52	15 - 100	35.00
o Semen analysis (Unweighted N = 42)	30.85	8 - 100	25.00
o Hysterosalpingogram (Unweighted N = 28)	418.00	25 - 3000	160.00
o Laparoscopy (Unweighted N = 27)	1117.00	80 - 2200	1000.00
o Clomiphene, 5 tablets (Unweighted N = 21.)	21.54	4 - 80	15.00

Table A-11: Percentage of Agencies Providing Infertility Services (other than Counseling) Which Rely on Various Community Awareness Methods

<u>Efforts</u>	<u>Agencies Providing Infertility Services other than Counseling</u>
Unweighted N =	253
Uses at least one community awareness effort	76%
<u>Type</u>	
o Client referrals	57
o Talks, presentations by staff	36
o Agency referrals	31
o Private physician referrals	21
o Infertility brochures, posters in other agencies	12
o Newspapers, magazines	8
o Radio, TV announcements	6
o Other efforts	11

Note: "Other" includes referral from other clinics, health departments and social services; general agency brochures.

D. Infertility Treatment Centers

Nineteen infertility treatment centers completed surveys describing their infertility treatment policies and practices. These centers were selected for study because physicians surveyed in a previous AGI survey (results described above) identified them as facilities where they referred patients with infertility problems. This selection procedure would have weighted the sample in favor of large facilities to which many physicians refer patients. Fifteen of the 19 centers are university-based; the rest are medical or research centers that provide infertility services. While the sample is small and not necessarily representative, the findings presented below illustrate the scope of services and the policies under which services are provided by such facilities across the country.

Five percent of the centers (one of the 19*) specialize in male patients only and provide all the male-related procedures and tests listed in Table C-1. Twenty-six percent serve women only, although most of these will also perform semen analysis in addition to all the female-related procedures and tests listed in Table C-1. Both types of centers also provide artificial insemination by donor. The remaining 68 percent of centers provide almost all the various infertility diagnosis and treatment procedures listed in Table C-1, grouped by the Title X levels for comparison with the family planning agencies and private physicians surveyed for this study. A large proportion of the centers (74 percent) offer in-vitro fertilization.

* Although only 19 centers were surveyed, results will be presented as percentages rather than numbers of centers. Numbers as well as percentages are shown in the tables.

Thirty-seven percent of the centers do not cover all infertility services and gave reasons for not providing some services (see Table C-2). Most common was the existence of other medical providers in the area and the lack of appropriately trained staff. Other reasons mentioned were lack of patient demand, cost of the services, and inadequate lab facilities. Those centers that do not provide all services will refer patients needing such care elsewhere; no centers said there was no facility to which they could refer patients.

Thirty-seven percent of the centers have at least one restriction on the infertility services they provide (see Table C-3). Most frequently, they limit their services to couples (16 percent) or to those seeking to become pregnant (11 percent). One center will not serve anyone over 40 years of age and another requires facility administration approval for specialized services. No center mentioned a minimum age or a policy to treat primary infertility only.

Only nine of the centers could estimate the number of infertility patients served annually and four could estimate the number of male patients. Table C-4 lists the range of estimates of the number of female infertility patients provided with various services annually. Because of the small number of centers providing estimates of male patients, these data are not presented. The centers vary widely in the volume of patients served, ranging from 500 to 3,500 female infertility patients annually. The data suggest that in these centers more patients are provided with specialized drug therapy than with specialized diagnostic procedures.

While all centers rely on patient fees to fund the services they provide, some also use public and other funding sources as well, as Table C-5 illustrates. Fifty-three percent accept Medicaid. Other state and local funds are used by 37 percent of the centers; 16 percent utilize Title X funds for their infertility services. Eleven percent use Maternal and Child Health and Social Services block grants. As Table C-6 shows, most centers accepting Medicaid reimbursement do so for all services they provide.

A few centers have financial policies which are favorable for low-income women and men seeking infertility care, which may reflect their use of public funds to provide these services (see Table C-6). Only sixteen percent will lower their fees based on patients' income; 37 percent will accept insurance reimbursement as payment in full. Without such policies or Medicaid eligibility and center acceptance of Medicaid reimbursement, these centers' services are usually too expensive for low-income couples.

Table C-6 illustrates the range of center charges for selected procedures. These charges varied widely among these 19 sites. Initial infertility visits cost from \$48 to \$155. The greatest variation was for a hysterosalpingogram, for which the highest charge is ten times the lowest charge. Given these high charges and that few centers have favorable fee policies for low-income patients, it is not surprising that in at least 74 percent of the centers, full-fee patients constitute half or more of the patient caseload (see Table C-6). No more than 10 percent of the centers have free patients, reduced fee patients or Medicaid patients comprising over half their patient caseload.

Most centers rely on referrals from private physicians (89 percent) or other clients of the centers (79 percent) to reach new patients (see Table C-7). Many (37 percent) also take referrals from other agencies. Relatively few (37 percent) make efforts to publicize their services by means of brochures and posters (21 percent), radio or television (21 percent), newspapers and magazines (26 percent) or through facility staff talks and presentations (32 percent). These findings suggest that couples with infertility problems may not become aware of treatment possibilities unless they are informed by their physician or have friends who have utilized the services. Part of the unmet need for services could be explained by lack of awareness of the local availability of such services as microsurgery or artificial insemination by donor.

Table C-1: Percentage of Infertility Treatment Centers That Provide Various Infertility Procedures, by Level

Procedures	Percent	Number
Total	100%	19
<u>Level I</u>		
o Includes:		
- counseling, education, information	95	18
- physical exam, women	95	18
- physical exam, men	74	14
- basal body temperature instruction	100	19
- infection investigation	100	19
o Percentage providing at least one Level I procedure	100	19
o Percentage providing all five Level I procedures	68	13
<u>Level II</u>		
o Includes:		
- semen analysis	95	18
- post coital test	95	18
- endometrial biopsy	89	17
o Percentage providing at least one Level II procedure	100	19
o Percentage providing all three Level II procedures	84	16
<u>Level III</u>		
o Includes:		
- sperm antibody test	89	17
- clomiphene (medical drug therapy)	95	18
- gonadotropin (hormone treatment)	95	18
- hysterosalpingogram	95	18
- laparoscopy	95	18
- sonography	89	17
- varicocelectomy	68	13
- female microsurgery	95	18
- male tubal reconstructive surgery	68	13
- artificial insemination, by donor	100	19
- genetic counseling, screening	95	18
- in vitro fertilization	74	14
o Percentage providing at least one Level III procedure	100	19
o Percentage providing all 12 Level III procedures	58	11

Note: The three levels used to group procedures are based on the Title I categorization of infertility procedures for family planning agencies, with the exception of basal body temperature instruction, which has been regrouped with Level I.

Table C-2: Reasons Given for Not Providing All Infertility Services, and Referral Policies

Characteristic	Percent	Number
o Reasons for not providing services		
Total	100%	19
- provide all services	63	12
- other medical providers in the area	26	5
- lack appropriately trained staff	16	3
- too little demand for these services	11	2
- too costly to provide services	11	2
- serve men only	11	2
o - inadequate lab facilities available	5	1
Referral policy		
Total	100%	18
- centers refer patients elsewhere	39	7
- center provide all necessary services	61	11

Table C-3: Percentage of Infertility Treatment Centers Having Various Restrictions on the Provision of Services

<u>Policies</u>	<u>Percent</u>	<u>Number</u>
Total	100%	19
Serve couples only	16	3
Serve only those seeking to become pregnant	11	2
Facility administration approval needed for specialized services	5	1
Will not serve anyone over 40 years of age	5	1
Percentage with at least one restriction	37	7

Table C-4: Range of Annual Number of Infertility Patients Served by Infertility Treatment Centers

Female Infertility Patients	Range
o Total (n = 5)	500-3500
o preliminary tests and procedures (a.g., semen analysis, postcoital test)(n = 8)	100-3500
o specialized diagnostic procedures (e.g., hysterosalpingogram) (n = 8)	60-400
o specialized drug therapy (e.g., clomiphene, gonadotropin) (n = 8)	100-2711
o specialized surgical procedures (e.g., laparoscopy, varicocelelectomy) (n = 9)	50-500

Note: Two centers reported visit data which were excluded from these estimates.

Table C-5: Percentage of Infertility Treatment Centers that Use Various Sources of Funding for Infertility Services

<u>Funding Source</u>	<u>Percent</u>	<u>Number</u>
Total	100%	19
o Patient fees	100	19
o Medicaid	53	10
o State and local funds	37	7
o Title X	16	3
o Maternal & Child Health Block Grant	11	2
o Social Services Block Grant	11	2
o Other	21	4

Note: "Other" funding sources include private contributions and insurance.

Table C-6: Financial Policies of Infertility Treatment Centers, and Range of Charges for Selected Procedures

Financial Policy	Percent	Number
o Total	100%	19
Accept Medicaid for:		
- counseling	53	10
- physical exam	53	10
- preliminary tests	47	9
- diagnostic procedures	53	10
- drug therapy	53	10
- surgical procedures	47	9
o Sliding scale or no charge for patients	16	3
Accept insurance reimbursement as payment in full	37	7
Usual fee for		
o <u>selected procedures</u>	<u>Range</u>	<u>Median</u>
- initial infertility visit (n = 15)	\$48-155	60
- semen analysis (n = 16)	18-75	35
- hysterosalpingogram (n = 13)	30-300	105
- laparoscopy (n = 13)	350-2000	800
- clomiphene (5 tablets) (n = 8)	7-30	15
- varicocelectomy (n = 5)	500-2000	1000
- tubal reversal (n = 13)	100-6500	2500
- vasectomy reversal (n = 6)	1500-7000	2100
o At least 50 percent of patients pay as follows:		
- Full fee	74%	14
- Medicaid	5	1
- Reduced fee	5	1
- Free	0	0
- Mixture of methods	5	1
- No answer	11	2

Table C-7: Percentage of Infertility Treatment Centers That Use Various Outreach Methods

Method	Percentage	Number
Total	100	19
o Referrals from private physicians	89	17
o Referrals from other clients	79	15
o Referral from other agencies	37	7
o Facility staff talks, presentations	32	6
o Newspapers, magazines	26	5
o Radio, TV	21	4
o Brochure, poster	21	4
Percentage using at least one community awareness effort	37	7

V. Need, Availability and Accessibility of Services

A. Results

This section attempts to synthesize information about the number of women needing infertility services and the number of physicians and family planning agencies that offer the services to arrive at an assessment of the accessibility of the services to those who need it.

Table N-1 summarizes the number of women (or couples) who need infertility services - that is, have a fertility impairment (other than contraceptive sterilization) that is possibly treatable and want to have a child (or more children).

Nationally there are some 2.4 million such women. Not included in Table N-1 are 880,000 couples who are contraceptively sterilized but would like to have the sterilization reversed in order to have children.

The cost of infertility services may affect the access of low-income women to infertility services. Among those in need of infertility services are 374,000 with household income under 150 percent of the poverty level. About 100,000 of those in need of services have Medicaid coverage, which may help to pay for the services if they can find a provider who accepts Medicaid reimbursement.

One or more components of infertility care are provided by at least 46,000 physicians in office-based practice. Almost all these provide initial testing and evaluation, and some 37,000 provide more specialized infertility tests and procedures. However, very few, only about 2,700, adjust their fees for low-income patients. Just under 10,000 will serve Medicaid patients.

Most family planning agencies also provide some infertility services. Nationally there are some 1,700 such agencies that take infertility patients. Seventy-three percent of these vary their fees or serve low-income patients without charge. Almost half of these are in the South. Only about half of the agencies which provide infertility services do any specialized infertility tests and procedures.

Comparing the need for infertility services with the number of physicians, the ratio is 53 potential patients for each physician who provides any infertility services. There are 66 potential patients for each physician who provides any specialized tests and procedures. The ratios are lower if hospital clinics, family planning agencies and other facilities which serve infertility patients are included with the physicians. From these ratios, it would appear that the physicians who now treat infertility are capable of serving all patients who need infertility services, provided that other segments of their practice don't demand so much of their time that too little is available for infertility.

Nevertheless, difficulty locating and getting to the offices of the physicians might still be a problem for some potential infertility patients. A rough indicator of the magnitude of this difficulty is the size of the total population (not limited to women or those in need) in thousands per service provider, as shown in Table W-1. This measure reflects the size of the town or community in which a provider is likely to be found. The first figure shown, for reference, is the population per obstetrician/gynecologist. Nationally, in 1982 there were about 10,800 in the population for each obstetrician/gynecologist. Regions differed slightly, the Northeast being the

best-served with 9,600 people per obstetrician/gynecologist, and the Northcentral states the least well served (12,500). In nonmetropolitan areas there were 20,100 residents per obstetrician/gynecologist, which suggests that women in those areas rely more on general practitioners for gynecological and obstetrical care.

By the population-per-physician measure, Level I infertility care is more available than care from obstetricians and gynecologists. There were only 5,100 people in the population for each physician offering some kind of infertility service. This means that there is a fair probability that a community with 5,000 residents will have such a physician and an excellent probability that a community of 20,000 will have one. Differences by region are relatively small. Nonmetropolitan areas are as well or better served than are metropolitan areas, in part because of the high proportion of nonmetropolitan general practitioners who treat infertility, as shown earlier.

At one for each 6,300 population, physicians providing more specialized (Level III) tests and procedures are less available than those providing any infertility service, but they are still more available than obstetrician/gynecologists. The South, at 10,100 population per physician, is less well served by physicians doing specialized tests and procedures than are the other regions. Nonmetropolitan areas are about as well served as are metropolitan areas.

Any specific test or procedure is less available than physicians who perform at least one test. For example, laparoscopy is one-half as available, sperm antibody tests and gonadotropin one-third, female microsurgery one-fifth, and male tubal reconstructive surgery is one-seventh as available as physicians who perform at least one specialized test or procedure. For

female microsurgery, there is one physician for each 33,000 people in the population, and for male tubal reconstructive surgery, one for every 46,000.

Even if infertility services exist in a community, there may be barriers to the utilization of those services. One such barrier may be lack of knowledge that the services exist or where they are provided. If there are several physicians in a community, potential patients must find one who will treat infertility. As was shown earlier, both physicians and family planning agencies almost always refer for services they don't provide. There remains a question, not answered by this study, about the extent of the public's knowledge of the existence of infertility treatment in general and of specific procedures such as artificial insemination by donor.

A second possible barrier is lack of financial resources with which to pay for infertility treatment. Few physicians offer infertility services on a sliding-fee scale; there are 86,000 in the population for each such physician. If family planning agencies which have sliding scales or free services are counted with the physicians, the population per provider is 59,000. This means that a patient in a community much smaller than 59,000 would have a good chance of not being able to find reduced-fee services from a physician or family planning clinic without traveling outside the community. For low-income women covered by Medicaid the situation is somewhat better at 24,000 population per Medicaid physician provider.

The picture for low-income women is not as bad as would appear from the above figures. In practice, many low-income women obtain medical services from hospital clinics, often without charge. As was shown earlier, hospital clinics were the most recent source of care for 12 percent of all infertility

patients, and many of the hospitals may have sliding fee scales or free services. On the other hand, it may be much easier for women to obtain an initial evaluation for infertility at a low fee or covered by Medicaid than it is to obtain more expensive specialized services.

B. Discussion

Demographers and medical specialists have suggested that the need for infertility services will expand over the next few years for a number of reasons. 13/ The number of people in their reproductive years will continue to increase for several years; thus, the number with impaired fecundity will increase. More women are postponing childbearing to their 30's, postponing the discovery that they have fertility problems as well as being exposed for a longer time to risk of disease which might impair their fecundity. These trends, along with recent advances in medical technology for screening and diagnosing fertility problems, indicate that more services, particularly the more specialized procedures, will be needed in the future.

The results of this study suggest that for people with adequate financial resources, either their own income or insurance with infertility coverage, infertility services are as available as most other types of medical care. Initial testing and evaluation is available from many physicians as well as from hospital clinics, family planning clinics and other health facilities. Specialized infertility services are less common but still appear to be generally available. Most family planning agencies give as a reason for not providing more types of infertility tests and procedures that such services are available elsewhere in the area. Of course, certain very specialized

procedures such as in-vitro fertilization may not be available in most areas. While the major infertility centers provide these procedures, there appear to be few such centers, and they serve only a small fraction of all infertility patients.

The situation is less favorable for low-income women, especially for those who need specialized tests and procedures. Apparently worst off are poor women without Medicaid or other insurance. Unfortunately, most poor women in need of infertility services are not Medicaid recipients, not because they are less poor than Medicaid recipients but because most have no children and are ineligible. Very few physicians say they are willing to adjust their fees according to their patients' income, and one might expect that those who do, do so only for their long-term patients. Thus it would appear to be very difficult for most low-income women to locate a physician willing to provide infertility services at low cost or without charge. In practice, most of the uninsured low-income women who obtain specialized infertility services probably do so at hospital clinics. Evidence of the impact of economic barriers to service is that, among women who need infertility services, only one-fourth of those under 150 percent of the poverty level have received them, as compared with about half of women with higher incomes (Table W-5).

The need for, and adequacy of, microsurgery for those who have been contraceptively sterilized involves many questions that cannot be answered definitively with the data available here. The most important of these is the number of sterilized couples who would actually choose to undergo an operation to have the sterilization reversed if there were no barriers to access to this service. The NSFG suggests that sterilization regret is widespread, with

-111-

reversal desired by 10 percent of those sterilized. However, many of these might not choose microsurgery after considering the inconvenience, risk of complications, and probability of success. The number of reversals actually performed is apparently small compared to the 880,000 women who say they or their partner would like a reversal. According to the Hospital Discharge Survey, in 1983 there were only 3,000 male reversal procedures (reconstruction of the vas deferens) and 18,000 female procedures ("other repairs of fallopian tube," which may be for sterilization reversal or other reasons), 14/ this in spite of the large number of physicians who say they are willing to perform the operations. Thus, there is an important question about the practical implications of the expressed desire for reversal.

Table 1: Need for Infertility Services, Number of Physician and Family Planning Agency Providers, and Population Per Provider, by Region and Metropolitan Status, United States, 1982

	Total	North- east	North- central	South	West	Metro	Non- Metropolitan
Number of women in need of infertility services (000's)							
Total	2,417	440	694	765	519	1,982	435
<150% of poverty level	374	*	*	*	*	*	*
on Medicaid	101	*	*	*	*	*	*
Number of physicians providing infertility services (000's)							
Provide any	45.5	8.6	12.9	13.0	11.0	33.4	11.9
Provide specialized**	36.5	7.3	9.7	7.8	8.7	27.9	8.4
Provide any, vary fees for low-income patients	2.7	0.4	0.8	0.6	0.9	1.7	1.1
Provide any, accept Medicaid	9.6	1.6	3.7	2.1	2.4	5.7	3.8
Number of family planning agencies providing infertility services							
Provide any	1,712	257	305	810	340	NA	NA
Provide specialized**	905	132	128	502	143	NA	NA
Provide any, vary fees for low-income patients	1,250	NA	NA	NA	NA	NA	NA
Population (000's) per provider							
Pop. per Ob/Gyn (for reference)	10.8	9.6	12.5	11.3	9.8	9.4	20.1
Per MD providing any infer. serv.	5.1	5.7	4.6	6.0	4.1	5.3	4.7
Per MD providing specialized* serv.	6.3	6.8	6.1	10.1	5.2	6.3	6.6
Per MD providing any infer. serv. and varies fees for low-income patients	86	123	74	131	50	104	51
Per MD or family planning agency that varies fees	59						
Per MD providing any infer. serv. and accepts Medicaid	24	31	16	37	19	31	15

Note: NA - Data not available

** Any Level III services

* Too few cases for an accurate estimate

REFERENCES

1. The Alan Guttmacher Institute, Final Report on a Study of the Provision of Voluntary Sterilization Services to U.S. Men and Women by Physicians in Private Practice, New York, September 1984.
2. A. Torres, "The Family Planning Program and Cuts in Federal Spending: Initial Effects of the Provision of Services," Family Planning Perspectives, 15:184-191, July/August 1983.
3. Title X guidelines, BCHS, 1981.
4. National Survey of Family Growth, Cycle III. Tape Contents Manual, prepared by Family Growth Survey Branch and Computer Applications Staff, Division of Vital Statistics, National Center for Health Statistics, 1984.
5. W.D. Mosher, and W.F. Pratt, "Fecundity and Infertility in the United States, 1965-82", NCHS Advanced Data, 104, February 11, 1985; and W.D. Mosher, "Reproductive Impairments in the United States, 1965-1982," Demography, 22:415, 1985.
6. J.D. Forrest and S.K. Henshaw, "What U.S. Women Think and Do About Contraception," Family Planning Perspectives, 15:157, 1983.
7. J.D. Forrest and S.K. Henshaw, op. cit., and C.A. Bachrach, "Contraceptive Practice Among American Women, 1973-1982," Family Planning Perspectives, 16:253, 1984.
8. R.S. Gold and A.M. Kenney, "Paying for Maternity Care," Family Planning Perspectives, 17:105, 1985, Table 1.
9. "Infertility and Sexually Transmitted Diseases: A Public Health Challenge," Population Reports, Series L. No. 4, July 1983; and N.L. Porter and F.S. Christopher, "Infertility: Towards an Awareness of a Need Among Family Life Practitioners," Family Relations, 33:309-311, April, 1984.
10. A. Torres, "Estimates of Cost of Infertility, Natural Family Planning Sterilization Services in Ambulatory Health Care Facilities," unpublished memorandum, The Alan Guttmacher Institute, New York, February, 1981.
11. M. Roland, "Infertility Therapy: Effect of Innovations and Increasing Experience," The Journal of Reproductive Medicine, 25:41-46, July, 1980.
12. The Alan Guttmacher Institute, Current Functioning and Future Priorities in Family Planning Services Delivery, New York, December 1983.
13. S.O. Aral and W. Cates, "The Increasing Concern with Infertility. Why Now?" Journal of American Medical Association 250:2327-2331, November 4, 1983; and M.M. Adams, G.P. Oakley, Jr., J.S. Marks, "Maternal Age and Births in the 1980's", Journal of American Medical Association 247:493-494, January 22/29, 1982.
14. National Center for Health Statistics, "Detailed Diagnoses and Surgical Procedures for Patients Discharged from Short-Stay Hospitals, United States, 1983." Vital and Health Statistics, Series 13, No. 82, March, 1985.

APPENDIX A: Private Physician Survey-
Infertility Services Questions

Infertility Services

Q-36 For about how many patients did you perform infertility diagnosis and/or treatment during 1982?

_____ (if none, please skip to Q-38.)

Q-37 Which of the following services do you perform for the purposes of infertility diagnosis and treatment?

- 1 Basal body temperature instruction 52
- 2 Postcoital test 51
- 3 Semen analyses 52
- 4 Hysterosalpingogram 53
- 5 Laparoscopy 50
- 6 Sonography 51
- 7 Sperm antibody/immunological evaluation 52
- 8 Investigation of infections associated with infertility (such as chlamydia or gonorrhea) 53
- 9 Medical drug therapy, such as clomiphene, for ovulation induction 54
- 10 Artificial insemination by donor 55
- 11 Microsurgery for female tubal obstruction, pelvic disease, or female sterilization reversal 56
- 12 Hormone treatment, such as gonadotropin, for ovulation induction 57
- 13 Male tubal reconstructive surgery 58
- 14 Other (Specify _____) 59

Q-38 Where do you refer the male and female patients for whom you cannot perform particular diagnoses or treatments?

	Male	Female	
I have never been asked.	1	1	52
I refer them to another physician in my group. (Specify specialization _____)	2	2	52
I refer them to an infertility specialist not in my group.	3	3	
I refer them to a special infertility center or clinic.	4	4	
I do not refer patients for infertility services.	5	5	
Other (Specify _____).	6	6	74 75 80 8 108

Q-39 Please circle all the reasons you do not refer some or all of your patients for particular diagnoses or treatments. (If you refer all of your patients for these services, please skip to Q-40.)

- 1 There is no place to refer patients.
- 2 The cost would be prohibitive for my patients.
- 3 There are no adequate laboratory facilities.
- 4 I provide all the appropriate tests myself.
- 5 Other (Specify _____)

Q-40 Are your fees standard for all your patients, or do they vary according to your patients' financial circumstances?

- 1 Standard fees for all patients.
- 2 Fees vary according to patients' financial circumstances.
- 3 Other (Specify _____)

Q-41 In your private practice, do you accept Medicaid reimbursements for infertility diagnosis or treatment?

- 1 No.
- 2 I have never been asked.
- 3 Yes.

APPENDIX B: Family Planning Agency Survey -
Provision of Infertility Services in the United States.

Provision of Infertility Services in the United States

The purpose of this survey is to help us understand more about the provision of infertility services. Please answer for your agency as a whole, including all clinics if your agency operates more than one site. If you wish to comment on any questions, please feel free to use the space in the margins or on the back page. Your comments will be read and taken into account.

Thank you for your help.

Return this questionnaire to:

The Alan Guttmacher Institute
360 Park Avenue South
New York, New York 10010

If you have any questions, please call Dr. Terry Orr, collect, at
(212) 685-5858, x220.

INFORMATION FOR INDIVIDUAL AGENCIES AND CLINICS WILL BE KEPT CONFIDENTIAL

Q-1 What was the total number of clinic locations operated by your agency during 1984 at which medical family planning services were provided? _____

Q-2 Are the following infertility diagnostic and treatment services available on-site in your agency's clinic(s), available off-site by another provider but funded through your agency, or not provided through your agency?

Infertility service	Provided on-site	Provided off-site	Not provided
Infertility counseling, education, information	1	2	3
Physical exam and history, women	1	2	3
Physical exam and history, men	1	2	3
Basal body temperature instruction	1	2	3
Postcoital test	1	2	3
Semen analysis	1	2	3
Hysterosalpingogram	1	2	3
Laparoscopy	1	2	3
Sonography	1	2	3
Endometrial biopsy	1	2	3
Sperm antibody/immunological evaluation	1	2	3
Investigation of infections associated with infertility, such as chlamydia or gonorrhea	1	2	3
Drug therapy, such as clomiphene, for ovulation induction	1	2	3
Artificial insemination by donor	1	2	3
Hormone treatment, such as gonadotropin, for ovulation induction	1	2	3
Microsurgery for female tubal obstruction, pelvic disease or female sterilization reversal	1	2	3
Male tubal reconstructive surgery	1	2	3
Vasectomy	1	2	3
Genetic counseling, screening	1	2	3
Other (Specify _____)			

Q-3 Please circle all the reasons that some or all of the services listed in Q-2 are not provided through your agency.

- 1 There is too little demand for these services.
- 2 It is too costly or inconvenient for us to provide these services.
- 3 We lack appropriately trained staff who can provide these services.
- 4 Available lab facilities are inadequate.
- 5 Other medical providers in the area offer these services.
- 6 Other (Specify _____)

Q-4 Do your clinic staff refer any patients for infertility diagnostic or treatment services either to other clinics within your agency or elsewhere?

- 1 Yes. (Please continue with Q-5.)
- 2 No.

If no, is it because they provide all necessary services?

- 1 Yes. (Please skip to Q-7.)
- 2 No. (Please skip to Q-17.)

Q-5

To what type of provider do clinic staff refer female patients for the infertility services listed below if these services are not provided at the clinic? Please consider couples being treated as two individual patients.

Type of provider	Counseling	Initial exam	Preliminary tests	Specialized tests
Other clinics run by this agency	1	1	1	1
Specific physician	2	2	2	2
Infertility treatment center (Specify _____)	3	3	3	3
Hospital (Specify _____)	4	4	4	4
Other (Specify _____)	5	5	5	5
Do not refer or never had patients requiring this procedure	6 (37-40)	6 (41-44)	6 (45-48)	6 (49-52)

Q-6

To what type of provider do clinic staff refer male patients for the infertility services listed below if these services are not provided at the clinic? Please consider couples being treated as two individual patients.

Type of provider	Counseling	Initial exam	Preliminary tests	Specialized tests
Other clinics run by this agency	1	1	1	1
Specific physician	2	2	2	2
Infertility treatment center (Specify _____)	3	3	3	3
Hospital (Specify _____)	4	4	4	4
Other (Specify _____)	5	5	5	5
Do not refer or never had patients requiring this procedure	6 (53-56)	6 (57-60)	6 (61-64)	6 (65-68)

If none of the infertility services listed in Q-2 are provided through your agency, please skip to Q-17.

Q-7

Please circle the policies your agency has for the provision of infertility diagnostic and treatment services.

- 1 Will serve couples only; will not serve an individual without his or her partner. 59
- 2 Will serve only patients who are seeking to become pregnant. 70
- 3 Will serve only those with primary infertility; will not serve those with secondary infertility problems (i.e., those who have given birth and are not able to become pregnant again). 71
- 4 Clinic staff may not perform specialized diagnostic or surgical procedures without agency approval. 72
- 5 Will not serve anyone below age _____. 73-75
- 6 Will not serve anyone over age _____. 76-78
- 7 Other (Specify _____) 80-82 79

Q-8

Please circle all sources of funding your agency uses to support the provision of infertility services.

- 1 Title X (regular grant) 83
- 2 Title X (special initiative; specify _____) 84
- 3 Medicaid (Title XIX) 85
- 4 Maternal and Child Health Block Grant (Title V) 86
- 5 Social Services Block Grant (Title XX) 87
- 6 State and local government 88
- 7 Patient fees 89
- 8 Other (Specify _____) 90-92

3-9

For each of the following infertility diagnostic or treatment services please indicate whether your agency accepts Medicaid reimbursements for eligible patients

Infertility service	Yes	No	Not reimbursable in my state	Service not provided to eligible patients requesting
Infertility counseling or education	1	2	3	4
Initial exam and history	1	2	3	4
Preliminary infertility tests and procedures (e.g., semen analysis, postcoital test)	1	2	3	4
Specialized diagnostic procedures (e.g., hysterosalpingogram)	1	2	3	4
Specialized drug therapy (e.g., clomiphene)	1	2	3	4
Specialized surgical procedures (e.g., laparoscopy, vasocoelectomy)	1	2	3	4

Q-10 Are your agency's fees for infertility services standard for all your patients, or do they vary according to your patients' financial or other circumstances?

- 1 Fees are standard for all patients.
- 2 Fees vary according to patients' financial circumstances. (Please enclose fee schedule.)
- 3 Other (Specify _____).

Q-11 Does your agency accept patients' insurance reimbursements as payment for infertility services provided, or do you require your patients to pay you directly?

- 1 We accept insurance reimbursements as payment in full.
- 2 We accept insurance reimbursements as partial payment and bill patient for balance.
- 3 Patient pays directly and seeks insurance reimbursement him/herself.
- 4 We have no specific policy; it depends upon the insurance company's policies.
- 5 We have no specific policy; it depends upon the procedure.
- 6 Other (Specify _____).

Q-12 What is your agency's maximum charge for the following infertility tests and procedures? (Please check the appropriate category for tests or procedures not provided through your agency.)

Infertility service	Maximum charge	Not provided
Initial visit, new patient (including physician's charge and other clinic fees)	\$ _____	_____
Postcoital test (including both clinic and lab test fees)	\$ _____	_____
Semen analysis (including both clinic and lab test fees)	\$ _____	_____
Hysterosalpingogram (including hospital fee, physician's and radiologist's charges, lab test fees)	\$ _____	_____
Diagnostic laparoscopy (including hospital fee, physician's and other charges)	\$ _____	_____
Clomiphene, for ovulation induction (five tablets)	\$ _____	_____

Q-13 Please circle the percentage of your infertility patients whose services are paid for in the following ways (percentages should add to 100):

	0%	1-10%	11-25%	26-50%	51-75%	76-100%
Patients who are covered by Medicaid	1	2	3	4	5	6
Patients who pay and/or whose insurance pays the full fee	1	2	3	4	5	6
Patients who pay a reduced fee	1	2	3	4	5	6
Patients who are served for free	1	2	3	4	5	6

Q-14 When did your agency begin providing infertility services?

19 _____

Q-15 How are women and men in need of infertility services in your community made aware that your agency provides these services?

- 1 Specific infertility brochures, posters placed in other community agencies. (Please enclose sample, if available.) 56
- 2 Radio, TV announcements. 57
- 3 Talks, presentations by agency staff. 58
- 4 Newspapers, magazines. (Please enclose sample, if available.) 59
- 5 Referrals from other agencies. 60
- 6 Referrals from private physicians. 61
- 7 Referrals from other clients. 62
- 8 Other (Specify _____) 63 64

Q-16 How many unduplicated patients received the following infertility services through your agency in the most recent year for which you have data? Please report separately for female and male patients (couples should be counted as two separate patients). Note that subtotals may not add to the total number of patients, because some patients may receive more than one type of service. If you cannot provide data for unduplicated patients, please estimate total visits.

Infertility service	Female		Male		
	Patients	or Visits	Patients	or Visits	
Total number of patients or visits	_____	_____	_____	_____	65-68 69 70-73 74
Counseling	_____	_____	_____	_____	75-78 79 80 2 803 5-8 9
Initial exam, history	_____	_____	_____	_____	10-13 14 15-17 18
Preliminary tests and procedures (e.g., semen analysis, postcoital test)	_____	_____	_____	_____	19-22 23 24-26 27
Specialized diagnostic tests and treatment (e.g., clomiphene, laparoscopy, vancocoelectomy)	_____	_____	_____	_____	28-30 31 32-34 35
What year do the above data cover? _____					36
Are these fiscal year _____ or calendar year _____ estimates?					37

Please use comparable data sources to estimate total medical family planning patients in the next question (Q-17).

Q-17 How many unduplicated medical family planning patients (including infertility patients) did your agency serve during the most recent year for which you have data? Please exclude patients receiving only referral services, pregnancy testing or abortion. If you cannot provide data for unduplicated patients, please estimate total medical visits.

	Patients or Visits		
Female family planning patients	_____	_____	38-42 43
Male family planning patients	_____	_____	44-47 48
What year do the above data cover? _____			49
Are these fiscal year _____ or calendar year _____ estimates?			50

Q-18 Please describe any problems you have encountered in your agency's provision of infertility services.

Q-19 Is there anything else you would like to tell us about the delivery of infertility services through your agency?

Respondent's name

Position

Agency

Telephone number

Please remember to enclose your fee schedule for infertility services.

THANK YOU FOR YOUR COOPERATION.

APPENDIX C: Infertility Treatment Center Survey -
Provision of Infertility Services in the United States

Provision of Infertility Services in the United States

Thank you for your help.

Return this questionnaire to:

The Alan Guttmacher Institute
360 Park Avenue South
New York, New York 10010

If you have any questions, please call Dr. Terry Orr, collect, at
(212) 685-5858, x220.

INFORMATION FOR INDIVIDUAL FACILITIES WILL BE KEPT CONFIDENTIAL

Q-1

Are the following infertility diagnostic and treatment services provided through your facility?

Infertility service	Provided	Not provided	
Infertility counseling, education, information	1	2	1
Physical exam and history, women	1	2	2
Physical exam and history, men	1	2	3
Basal body temperature instruction	1	2	4
Postcoital test	1	2	5
Semen analysis	1	2	10
Hysterosalpingogram	1	2	11
Laparoscopy	1	2	12
Sonography	1	2	13
Endometrial biopsy	1	2	14
Sperm antibody/immunological evaluation	1	2	15
Investigation of infections associated with infertility, such as chlamydia or gonorrhea	1	2	16
Drug therapy, such as clomiphene, for ovulation induction	1	2	17
Artificial insemination by donor	1	2	18
Hormone treatment, such as gonadotropin, for ovulation induction	1	2	19
Microsurgery for female tubal obstruction, pelvic disease or female sterilization reversal	1	2	20
Male tubal reconstructive surgery	1	2	21
Vasectomy	1	2	22
Genetic counseling, screening	1	2	23
In vitro fertilization	1	2	24
Other (Specify _____)			25-26

Q-2

Please circle all the reasons that some or all of the services listed in Q-1 are not provided through your facility.

- 1. There is too little demand for these services. 27
- 2. It is too costly or inconvenient for us to provide these services. 28
- 3. We lack appropriately trained staff who can provide these services. 29
- 4. Available lab facilities are inadequate. 30
- 5. Other medical providers in the area offer these services. 31
- 6. Other (Specify _____). 32-33
- 7. We provide all services. 34

Q-3

Do your staff refer any patients elsewhere for infertility diagnostic or treatment services?

- 1. Yes. (Please continue with Q-4.)
- 2. No. We provide all necessary services.
- 3. No. We neither provide all necessary services nor refer patients elsewhere because: (please circle)
 - a. There is no place to refer patients.
 - b. Cost would be prohibitive for patients.
 - c. Other (Specify _____)

Q-4

When did your facility begin providing infertility services?

19 _____

Q-5

Please circle the policies your facility has for the provision of infertility diagnostic and treatment services

- 1 Will serve couples only; will not serve an individual without his or her partner 33
- 2 Will serve only patients who are seeking to become pregnant. 39
- 3 Will serve only those with primary infertility; will not serve those with secondary infertility problems (i.e., those who have given birth and are not able to become pregnant again). 40
- 4 Staff may not perform specialized diagnostic or surgical procedures without consultation or administrator's approval. 41
- 5 Will not serve anyone below age _____ 42-43-44
- 6 Will not serve anyone over age _____ 45-46-47
- 7 Other (Specify _____). 48-49
- 8 None of the above. 50

Q-6

Please circle all sources of funding your facility uses to support the provision of infertility services.

- 1 Patient fees 51
- 2 Medicaid (Title XIX) 52
- 3 Title X, Public Health Service Act 53
- 4 Maternal and Child Health Block Grant (Title V) 54
- 5 Social Services Block Grant (Title XX) 55
- 6 State and local government 56
- 7 Other (Specify _____) 57-58

Q-7

For each of the following infertility diagnostic or treatment services, please indicate whether your facility accepts Medicaid reimbursements for eligible patients.

Infertility service	Yes	No	Not reimbursable in my state	Service not provided; no eligible patients requesting	
Infertility counseling or education	1	2	3	4	59
Initial exam and history	1	2	3	4	60
Preliminary infertility tests and procedures (e.g., semen analysis, postcoital test)	1	2	3	4	61
Specialized diagnostic procedures (e.g., hysterosalpingogram)	1	2	3	4	62
Specialized drug therapy (e.g., clomiphene)	1	2	3	4	63
Specialized surgical procedures (e.g., laparoscopy, vancocetomy)	1	2	3	4	64

Q-8

Are your facility's fees for infertility services standard for all your patients, or do they vary according to your patients' financial or other circumstances?

- 1 Fees are standard for all patients.
- 2 Fees vary according to patients' financial circumstances. (Please enclose fee schedule.)
- 3 Other (Specify _____). 65

Q-9

Does your facility accept patients' insurance reimbursements as payment for infertility services provided, or do you require your patients to pay you directly?

- 1 We accept insurance reimbursements as payment in full.
- 2 We accept insurance reimbursements as partial payment and bill patient for balance.
- 3 Patient pays directly and seeks insurance reimbursement from/herself.
- 4 We have no specific policy; it depends upon the insurance company's policies.
- 5 We have no specific policy; it depends upon the procedure.
- 6 Other (Specify _____). 66-67

Q-10 What is your facility's usual charge for the following infertility tests and procedures? (Please check the appropriate category for tests or procedures not provided through your facility; include the physician's charge, lab test and other facility fees and hospital fees, when appropriate.)

Infertility service	Usual charge	Not provided	
Initial visit, new patient	\$ _____	_____	58-77
Semen analysis	\$ _____	_____	72-75
Hysterosalpingogram	\$ _____	_____	75-79
Diagnostic laparoscopy	\$ _____	_____	80-100, 5-8
Climonene, for ovulation induction (five tablets)	\$ _____	_____	9-12
Vancomycin	\$ _____	_____	13-16
Reversal of tubal ligation	\$ _____	_____	17-20
Vasectomy reversal	\$ _____	_____	21-24

Q-11 Please circle the percentage of your infertility patients whose services are paid for in the following ways (percentages should add to 100):

	0%	1-10%	11-25%	26-50%	51-75%	76-100%	
Patients who are covered by Medicaid	1	2	3	4	5	6	25
Patients who pay and/or whose insurance pays the full fee	1	2	3	4	5	6	25
Patients who pay a reduced fee	1	2	3	4	5	6	27
Patients who are served for free	1	2	3	4	5	6	28

Q-12 How do women and men in need of infertility services in your community learn that you provide these services?

- 1 Specific infertility brochures, posters placed in community agencies. (Please enclose sample, if available.) 29
- 2 Radio, TV announcements. 20
- 3 Talks, presentations by agency staff. 31
- 4 Newspapers, magazines. (Please enclose sample, if available.) 22
- 5 Referrals from agencies. 23
- 6 Referrals from private physicians. 34
- 7 Referrals from other clients. 25
- 8 Other (Specify _____). 25 37
- 9 None of the above. 28

Q-13 How many unduplicated patients received the following infertility services through your facility in the most recent year for which you have data? Please report separately for female and male patients (couples should be counted as two separate patients). Note that subtotals may not add to the total number of patients, because some patients may receive more than one type of service. If you cannot provide data for unduplicated patients, please estimate visits.

Infertility service	Female		Male		
	Patients	or Visits	Patients	or Visits	
Total number of patients or visits	_____	_____	_____	_____	39-42, 43 44-47 48
Preliminary tests and procedures (e.g., semen analysis, postcoital test)	_____	_____	_____	_____	49-52, 53 54-57 58
Specialized diagnostic procedures (e.g., hysterosalpingogram)	_____	_____	_____	_____	59-62, 53 54-57 58
Specialized drug therapy (e.g., clomiphene, gonadotropin)	_____	_____	_____	_____	59-72, 73 74-77 78
Specialized surgical procedures (e.g., laparoscopy, vancomycin)	_____	_____	_____	_____	80, 2 80-83
What year do the above data cover? _____					84-87 88

Q-14 Please describe any problems you have encountered in your facility's provision of intercity services

Q-15 Is there anything else you would like to tell us about the delivery of intercity services through your agency?

Respondent's name

Position

Facility

Telephone number

Please remember to enclose your fee schedule for intercity services.

THANK YOU FOR YOUR COOPERATION.

H B

463



Alaska State Legislature

House of Representatives

COMMITTEE ON HEALTH, EDUCATION
AND SOCIAL SERVICES

OFFICIAL BUSINESS

POUCH
JUNEAU AK 998
463 375

HOUSE HESS LETTER OF INTENT

TO HB 463

It is the intent of the House Health, Education and Social Services Committee that the appropriation designated in HB 463, relating to asbestos management plans for schools, be included in HB 375, the budget bill.

Handwritten signature of Niilo Koponen in cursive script.

Niilo Koponen, Co-Chair
House HESS Committee

Handwritten signature of Johnny Ellis in cursive script.

Johnny Ellis, Co-Chair
House HESS Committee

DATED: February 29, 1988

HOUSE COMMITTEE REPORT

(7)

Date referred: 2/11/88

FURTHER REFERRALS: Finance

DATE: 2/29/88

The Health, Education and Social Services Committee has considered HB 463

"An Act making a special appropriation to the Department of Education for grants to school districts and regional educational attendance areas for asbestos management plans; and providing for an effective date."

RECOMMENDS:

- replace with _____ the same title
- attached amendment(s) a new title
- do pass
- do not pass
- no recommendation
- individual recommendations
- additional referral to the _____ Committee

ADOPTS: _____ letter of intent *will follow*

ATTACHES NEW FISCAL NOTE(S):

- fiscal impact same as previous fiscal note published _____
- zero fiscal note same as previous zero fiscal note published _____
- zero with analysis

SIGNING DO PASS:

John Ellis

Patricia Korman

Angela Wesley

Include funding in capital budget.

SIGNING OTHER RECOMMENDATIONS:

Bill Anderson - No Rec.

Ross E. Kelly - No Rec.

John Ellis

 Chairman's signature
Patricia Korman

★ Fairbanks North Star Borough

809 Pioneer Road

P.O. Box 1267

Fairbanks, Alaska 99707

907/452-4761

February 4, 1988

The Honorable Mark Boyer
House of Representatives
P. O. Box V (Mail Stop 3100)
Juneau, AK 99811

Dear Representative Boyer:

The Fairbanks North Star Borough has approximately 2,000,000 square feet of school buildings. Cost for detailed inspection as outlined in the federal register (see attached) has been \$0.25 to \$0.50 per square foot depending on age and complexity of the building. We have estimated \$0.30 to arrive at a total of \$600,000.

Please let me know if further information is desired.

Sincerely,



Neil Keranen, AIA
Director
Department of Public Works

NK5-4/ij

Attachments

cc: Juanita Helms, Borough Mayor
Cindy Marquette, Special Assistant to the Mayor

File: 1988 CIP

or recreational activities for an academic course in physical education.

(3) Any other facility used for the instruction or housing of students for the administration of educational or research programs.

(4) Any maintenance, storage, or utility facility, including any hallway, essential to the operation of any facility described in this definition of "school building" under paragraphs (1), (2), or (3).

(5) Any portico or covered exterior hallway or walkway.

(6) Any exterior portion of a mechanical system used to condition interior space.

"Significantly damaged friable miscellaneous ACM" means damaged friable miscellaneous ACM where the damage is extensive and severe.

"Significantly damaged friable surfacing ACM" means damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

"State" means a State, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Northern Mariana Islands, the Trust Territory of the Pacific Islands, and the Virgin Islands.

"Surfacing ACM" means surfacing material that is ACM.

"Surfacing material" means material in a school building that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

"Thermal system insulation" means material in a school building applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes.

"Thermal system insulation ACM" means thermal system insulation that is ACM.

"Vibration" means the motion of friable ACM that may result in the release of fibers.

§ 763.84 General local education agency responsibilities.

Each local education agency shall:

(a) Ensure that the activities of any persons who perform inspections, reinspections, and periodic surveillance, develop and update management plans, and develop and implement response actions, including operations and maintenance, are carried out in accordance with Subpart E of this part.

(b) Ensure that all custodial and maintenance employees are properly

trained as required by this Subpart E and other applicable Federal and/or State regulations (e.g., the Occupational Safety and Health Administration asbestos standard for construction, the EPA worker protection rule, or applicable State regulations).

(c) Ensure that workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress.

(d) Ensure that short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding the locations of ACM and suspected ACM assumed to be ACM.

(e) Ensure that warning labels are posted in accordance with § 763.95.

(f) Ensure that management plans are available for inspection and notification of such availability has been provided as specified in the management plan under § 763.93(g).

(g)(1) Designate a person to ensure that requirements under this section are properly implemented.

(2) Ensure that the designated person receives adequate training to perform duties assigned under this section. Such training shall provide, as necessary, basic knowledge of:

(i) Health effects of asbestos.

(ii) Detection, identification, and assessment of ACM.

(iii) Options for controlling ACM.

(iv) Asbestos management programs.

(v) Relevant Federal and State regulations concerning asbestos, including those in this Subpart E and those of the Occupational Safety and Health Administration, U.S. Department of Labor, the U.S. Department of Transportation and the U.S. Environmental Protection Agency.

(h) Consider whether any conflict of interest may arise from the interrelationship among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under this subpart.

§ 763.85 Inspection and reinspections.

(a) *Inspection.* (1) Except as provided in paragraph (a)(2) of this section, before the local education agency shall inspect each school building that they lease, own, or otherwise use as a school building to identify all locations of friable and nonfriable ACM.

(2) Any building leased or acquired on or after October 12, 1988, that is to be

used as a school building shall be inspected as described under paragraphs (a) (3) and (4) of this section prior to use as a school building. In the event that emergency use of an uninspected building as a school building is necessitated, such buildings shall be inspected within 30 days after commencement of such use.

(3) Each inspection shall be made by an accredited inspector.

(4) For each area of a school building, except as excluded under § 763.89, each person performing an inspection shall:

(i) Visually inspect the area to identify the locations of all suspected ACM.

(ii) Touch all suspected ACM to determine whether they are friable.

(iii) Identify all homogeneous areas of friable suspected ACM and all homogeneous areas of nonfriable suspected ACM.

(iv) Assume that some or all of the homogeneous areas are ACM, and, for each homogeneous area that is not assumed to be ACM, collect and submit for analysis bulk samples under §§ 763.86 and 763.87.

(v) Assess, under § 763.89, friable material in areas where samples are collected, friable material in areas that are assumed to be ACM, and friable ACM identified during a previous inspection.

(vi) Record the following and submit to the person designated under § 763.84 a copy of such record for inclusion in the management plan within 30 days of the inspection:

(A) An inspection report with the date of the inspection signed by each accredited person making the inspection, State of accreditation, and if applicable, his or her accreditation number.

(B) An inventory of the locations of the homogeneous areas where samples are collected, exact location where each bulk sample is collected, dates that samples are collected, homogeneous areas where friable suspected ACM is assumed to be ACM, and homogeneous areas where nonfriable suspected ACM is assumed to be ACM.

(C) A description of the manner used to determine sampling locations, the name and signature of each accredited inspector who collected the samples, State of accreditation, and, if applicable, his or her accreditation number.

(D) A list of whether the homogeneous areas identified under paragraph (a)(4)(vi)(B) of this section are surfacing material, thermal system insulation, or miscellaneous material.

(E) Assessments made of friable material, the name and signature of each accredited inspector making the

PROPOSED NEW EPA REGULATIONS WILL HAVE A DRAMATIC EFFECT ON ASBESTOS ABATEMENT INDUSTRY

by: William M. Ewing Jr., CIH

On October 22, 1986 President Ronald Reagan signed into law the Asbestos Hazard Emergency Response Act of 1986. This Act was the Congressional mandate that the U.S. Environmental Protection Agency (EPA) shall establish specific rules and regulations governing the identification, evaluation and control of asbestos-containing materials (ACM) in our Nation's schools. Many in the asbestos identification and control field followed the passage of this law with great interest, knowing that it would undoubtedly serve as the blueprint for handling asbestos in other buildings, including public, commercial and even private buildings.

Even before Halloween the EPA's Asbestos Action Program in Washington, D.C. was busily underway planning their strategy to produce the voluminous regulations before the six-month deadline set by Congress. Unlike most previous Congressional Legislation, this one contained a "hammer clause" providing EPA with the incentive to get the regulations proposed quickly. If the EPA had not published the proposed regulations, provisions contained in the Act itself would become law. One of these provisions would have essentially turned the document *Guidance For Controlling Asbestos-Containing Materials in Buildings* into law. The "purple book," as it is readily referred to, was never designed to be a regulation and would be subject to wide-ranging interpretation, misinterpretation, and be almost impossible to enforce. The "hammer clause" did serve a very useful purpose for EPA during the formation of the newly proposed regulations. It was an easy way to determine what was the intent of the Congressional architects of the Act.

Regulation by Negotiation

In the past, most regulations have been written by EPA staffers after studies are reviewed, fact-finding missions completed, experts consulted, and hearings held. However, a more recent trend has been the use of negotiation to prepare proposed regulations. In this process, representatives from numerous factions having differing views on various issues to be addressed are called together and given the task of writing the rule. It is a novel concept which relies on the theory that through the negotiation process and inevitable conflicts that occur, the cream rises to the top. It also can be effective in making the rule more acceptable to the various parties that will be affected by it. In the case of AHERA, the EPA pulled together representatives from various associations and interest groups to comprise a 24-member panel who from February through April, met regularly to wade through the issues surrounding asbestos in schools.

The rule, as published, is the culmination of their efforts. While no one interested party at the regulatory negotiation can say they were in complete agreement with the rule as it was proposed, there did appear to be agreement on the necessity of the rule and the intended impact it was to have on schools (i.e., move those to action that had not done so under the old asbestos-in-schools identification and notification rule).

ELEMENTS OF THE PROPOSED REGULATIONS

The new proposed regulations, commonly referred to as AHERA, will be found in 40 CFR 763 Subpart E §763.80 -§ 763.99 and apply to all primary and secondary schools, public

and private, in the U.S. and its territories/possessions, including American schools on military bases in foreign countries. Below, by section, are the key elements of the rule followed by a short discussion of the Model Accreditation Program issued in conjunction with the regulations, but not formerly a part of the proposal for comment by the public and interested parties.

§ 763.80 SCOPE AND APPLICATION: This rule requires Local Educational Agencies (LEA's) to identify friable and non-friable asbestos-containing material in public and private elementary and secondary schools by visually inspecting school buildings for such materials, sampling friable materials, and having samples analyzed by appropriate techniques referred to in the rule. The rule requires Local Education Agencies to submit management plans to the Governor of their State by October 12, 1988, begin to implement the plans by July 9, 1989, and complete implementation of the plans in a timely fashion. In addition, the LEA's are required to use persons who have been accredited to conduct inspections, develop management plans, or perform response actions. The rule also includes recordkeeping requirements.

§ 763.81 DEFINITIONS: The rule contains some definitions that may be unfamiliar to even the most experienced professionals in the field. For example, friable now means, for the purposes of this rule, material, which when dry, may be crumbled, pulverized, or reduced to powder by hand pressure, and includes non-friable material after such previously non-friable material becomes damaged to the extent that

PROPOSED NEW EPA REGULATIONS (CONTINUED)

when dry it may be crumbled, pulverized, or reduced to powder by hand pressure. Other key definitions that created heated disputes during the regulatory negotiations include those for damaged friable surfacing ACM and significantly damaged friable surfacing ACM.

§ 763.82 *GENERAL LEA RESPONSIBILITIES*: This section of the regulation makes it clear that the LEA is responsible for compliance with the provisions of this regulation. It requires the school system to perform inspections, reinspections, periodic surveillance, develop and update management plans, develop and implement response actions (i.e. removal, enclosure, etc.), develop and implement operations and maintenance programs, as well as train all custodial and maintenance personnel. It places the burden on the school to notify parents, school employees, and outside contractors about the locations of the asbestos and what actions are being taken to prevent unnecessary exposure to asbestos. This section further lists other responsibilities of the school system in relation to the law.

§ 763.85 *INSPECTION AND REINSPECTIONS*: This section of the law requires all schools to inspect their buildings for both friable and non-friable asbestos-containing materials and construct an inventory of the locations of proven or assumed ACM. This section further requires the LEA to reinspect the school once every 3 years to reassess the condition of the material and determine if previously non-friable material has become friable. All inspections must be performed by an accredited inspector (See EPA Model Accreditation Plan).

§ 763.86 *SAMPLING*: Bulk sampling is not required since a school may elect to assume any or all materials contain asbestos. However, to prove that a material suspected of being ACM (i.e. fireproofing, pipe lagging) does not contain asbestos bulk sampling must be conducted as described in this section. Bulk samples must be collected by an

accredited inspector.

§ 763.87 *ANALYSIS*: All bulk samples must be analyzed in a laboratory accredited by the National Bureau of Standards (or EPA in the interim). The method must be polarized light microscopy (PLM). A finding of less than 1 percent asbestos is required for all samples in a homogenous area to determine no ACM; but only one sample needs to be analyzed to determine the homogenous area contains ACM.

§ 763.88 *ASSESSMENT*: This section of the law requires the accredited inspector to assess all friable known or assumed ACM in a school building. The ACM must be classified into categories according to the degree of damage of the material (i.e., damaged or significantly damaged) and the potential for future damage or significant damage.

§ 763.90 *RESPONSE ACTIONS*: Thermal insulation which is damaged or significantly damaged must be repaired, or if it cannot be repaired, must be removed. Significantly damaged friable surfacing insulation must be removed, unless through the use of encapsulation and/or enclosure the material can be reclassified into the "damage category," where it can either be removed or repaired. Where there exists a potential for damage or significant damage the ACM must be removed, unless it can be shown that enclosure, encapsulation, or an operations and maintenance program alone can eliminate the reasonable likelihood that the ACM will become damaged. All response actions (i.e., removal, enclosure, encapsulation and repair) must be carried out by an accredited design professional, an accredited contractor, and using only certified asbestos abatement workers. Following a removal, enclosure, or encapsulation project the work area must be cleared using visual inspections and aggressive sampling techniques during air monitoring. Small projects (less than 160 square feet or 260 linear feet) may be cleared using phase-contrast microscopy (PCM), when no sample exceeds 0.01 fibers per cubic centimeter of air (f/cc). For larger projects, transmission electron

microscopy (TEM) must be performed and the average of the results must not exceed 0.02 f/cc (or the outside air, whichever is higher) to clear the project. These TEM clearance requirements will be phased in over a three-year period to allow for laboratories to become accredited under the National Bureau of Standards accreditation program.

§ 763.91 *OPERATIONS AND MAINTENANCE*: The LEA must implement an operations and maintenance program (OMP) in any building where friable asbestos-containing building material (ACBM) is present or assumed to be present. All must receive a two-hour training session; and those employees who may disturb any ACBM must receive an additional 14 hours of instruction. Initial cleaning of the areas containing friable surfacing material or damaged thermal insulation must be performed. Periodic surveillance must be performed at least every six months. Additional requirements for the OMP and specific directions for responding to fiber release episodes are also included in this section.

§ 763.93 *MANAGEMENT PLANS*: On or before October 12, 1988, each LEA must develop an asbestos management plan for each school, including all buildings of the school that they lease, own, or otherwise use. The management plan must be developed by an accredited management planner. The details of the management plan are described in this section. Essentially, the plan must include where the asbestos-containing materials are located, what actions are being taken by the LEA, and how the LEA is complying with the provisions of this standard.

§ 763.95 *WARNING LABELS*: The LEA must attach warning labels adjacent to any friable and non-friable ACBM located in routine maintenance areas of each school building. The warning label must read "CAUTION: ASBESTOS. HAZARDOUS. DO NOT DISTURB WITHOUT PROPER TRAINING AND EQUIPMENT."

§ 763.97 *COMPLIANCE AND ENFORCEMENT*: Depending upon

PROPOSED NEW EPA REGULATIONS (CONTINUED)

the nature of the violation the LEA may be fined \$5,000-\$25,000 per day in violation. If a violation is knowing or willful, criminal penalties may also be assessed. Additional information regarding injunctive relief, citizen complaints, and EPA inspections are contained in this section of the rule.

§ 763.98 WAIVER; DELEGATION TO STATE: This section of the law deals with the procedures for EPA to waive their enforcement of this rule in any state that has an equivalent state program. It also requires EPA to monitor the state program and determine its effectiveness.

§ 763.99 EXCLUSIONS: This section of the law deals with the procedures allowing certain LEAs to be excluded from parts of this law if they have already achieved substantial compliance through actions they have already taken. Note: simple compliance with the old "asbestos-in-schools rule" does not exempt a school from this regulation.

APPENDICES: Included among the Appendices to this regulation are the "Interim Transmission Electron Microscopy Analytical Method and Field Sampling Protocol for the Clearance Testing of an Abatement Site" (ed. note: see summary of protocol by James R. Millette, this issue) and the "Work Practices and Engineering Controls for Small-Scale, Short-Duration Asbestos Operations, Maintenance and Repair Activities."

EPA MODEL ACCREDITATION PLAN: The 1986 Asbestos Hazard Emergency Response Act required EPA to develop a model plan for the

accreditation of persons who perform any of the following functions for compliance with this rule.

- (1) Inspect for ACM in school buildings (Accredited Inspectors).
- (2) Assess the condition of the material and prepare management plans for schools (Accredited Management Planners).
- (3) Design response actions, such as removal projects (Accredited Design Professionals).
- (4) Carry out response actions such as removal projects (Accredited Asbestos Contractors).

Additionally, the model accreditation plan specifies the requirements for the certification of asbestos abatement workers. The model accreditation plan does not apply to those persons who perform only small-scale, short-duration operations and maintenance tasks. The training requirements of these personnel are addressed in the operations and maintenance section of the regulation.

The intention of the plan is to provide a guide for states to adopt in setting up their own programs. It is hoped that the states will adopt a plan similar to the model program establishing some degree of uniformity and allowing reciprocity among states. For each accreditation referred to above, specific requirements are listed as minimum to become accredited under the plan. For the most part it includes attendance at an approved training course and successfully completing an examination covering the topics of the course. Re-accreditation is required through re-training. Individuals who can document that they have received equivalent training and passed an equivalent examination can be grandfathered into the accreditation program for a period of one year.

SUMMARY AND CONCLUSIONS

The new AHERA regulations, in conjunction with the recent OSHA Asbestos Standard (29 CFR 1926.58) will undoubtedly serve as the basis for addressing the problem of asbestos-in-buildings. The above regulations are currently proposed, and may change before they become final in October 1987. This offers a great opportunity for those professionals experienced in asbestos identification, evaluation and control to have input through public comment and the inevitable hearings on this new rule during the upcoming weeks. Regardless of the final outcome of the rule, we can expect AHERA to shape the future with respect to asbestos in schools and other buildings.

(Post-script Note: Those wishing to comment on the proposed regulations should send their written comments before June 26, 1987, to: Document Control Officer (TS-790), Office of Toxic Substances, Environmental Protection Agency, Room NE-G004., 401 M Street, SW, Washington, DC 20460. Comments should include the docket control number (OPTS--62048C). For further information on the comment process contact: Edward A. Klein, Director, TSCA Assistance Office (TS-799), Office of Toxic Substances, Environmental Protection Agency, Room E-543, 401 M Street, SW, Washington, DC 20460; Telephone: (202) 554-1404.

*William M. Ewing, Jr., CIH
Georgia Institute of Technology
GTRI/EDL/EHSD
O'Keefe Building, Room 029
Atlanta, GA 30332
(404) 894-3806*



Asbestos Abatement Report

News on Control, Liability and Funding

Volume 1, Number 10

BURAFF PUBLICATIONS, INC.

October 19, 1987

FINAL AHERA ABATEMENT RULES MIRROR EPA'S EARLIER PROPOSAL

Final rules on controlling asbestos in schools, issued by the Environmental Protection Agency Oct. 17, are identical in essential respects to the agency's original proposal. The rules were issued under the Asbestos Hazard Emergency Response Act, which requires public and private elementary and secondary school systems to inspect for, manage, and abate asbestos in their school buildings.

Like the proposed rules issued by EPA April 30 (52 FR 15820), the final rules set no quantitative standards to guide abatement response actions. Instead, the rules require school officials to select one of five types of responses "in appropriate circumstances," based on the type of asbestos-containing materials found and the condition of these materials, according to an EPA summary issued Oct. 19.

Required response actions range from maintenance and reinspection to removal. Other response alternatives include repair, encapsulation, and enclosure.

Representatives of former asbestos manufacturers had sought to persuade EPA to set numerical standards – based on air monitoring for asbestos fibers – to guide abatement responses. The manufacturers said this would curb a rush toward widespread asbestos removal projects. (See related story, this issue.)

Successful completion of response actions will be determined by air sampling. Until October 1989, abatement actions will be considered complete when samples measure 0.01 fibers per cubic centimeter (f/cc), as analyzed by Phase Contrast Microscopy (PCM). In 1989 and 1990, use of PCM will be phased out and replaced by

(Continued on p. 7)

EPA DELAYS RELEASE OF STUDY ON COMMERCIAL, PUBLIC BUILDINGS

The Environmental Protection Agency is "probably still three to four weeks away" from releasing the results of a major study on the need for federal asbestos abatement regulations for non-school public and commercial buildings, Michael Stahl, chief of EPA's Asbestos Action Program told AAR Oct. 15.

The delay comes despite an Oct. 17 legislative deadline for the study.

But even without the study, promulgation of a final asbestos-in-schools rule under the Asbestos Hazard Emergency Response Act has sparked increased interest in prospects for federal asbestos regulations for non-school buildings.

Data collection and preliminary analysis for the non-school buildings study are complete, Stahl said, but a report to Congress is still under review.

AHERA directs EPA to conduct the study and to "consider and report" whether non-school buildings should be subject to the same inspection and abatement requirements that the law imposes on schools. Congress asked for agency recommendations "that explicitly address whether there is a need to establish standards for, and regulate asbestos exposure in, public and commercial buildings."

The EPA report is expected to be a starting point for consideration of a bill (S 981) introduced earlier this year by Sen. Robert Stafford (R-Vt). The bill would extend abatement requirements to an estimated 750,000 non-school buildings nationwide – including government buildings, offices, stores, and apartment buildings (AAR, June 1, p. 4). Hearings on the bill are expected once the EPA study is sent to Congress.

Those who will bear the brunt of any new regulations and costs are ambivalent about the prospect of asbestos regulations. They want a federal asbestos standard for

(Continued on p. 2)

Inside . . .

Federal appeals court upholds order to abide by settlement in Greenville County School District v. U.S. Gypsum Co. case . . . p. 2

OSHA official in Chicago says federal worker protection rules for handling asbestos are 'minimal' . . . p. 4

Court action by New York City teachers' group forces school board to close high school in Brooklyn and clean up asbestos . . . p. 4

Doctor in Texas finds evidence of early accumulation of asbestos fibers in lungs of infants; some children found more susceptible . . . p. 5

EPA proposes penalties for schools in Pennsylvania and Maryland charged with TSCA violations . . . p. 5

Washington, DC-area abatement contractor charged by EPA with violations of asbestos removal notification regulations . . . p. 5

British researcher cites new evidence of problems with removal of asbestos; manufacturers' attorney asks EPA to look at study . . . p. 6

Federal court in Pennsylvania dismisses land company's suit based on Superfund law for costs of cleaning up asbestos waste . . . p. 6

Senate approves \$50 million in abatement assistance funds . . . p. 7

Buildings Study, from p. 1

non-school buildings, but they don't want the type of regulations EPA has just issued for schools.

"[Commercial] building owners very badly want air monitoring and a standard" for asbestos-in buildings, Safe Buildings Alliance Vice President John Biechman told AAR Oct. 13. "They are saying, 'I want the federal government to give me a standard.'"

But, Biechman added, "building owners feel that a regulation without a standard would be a disaster for them." The asbestos-in-schools rule is a regulation without a standard, he said.

The Safe Buildings Alliance represents five major former manufacturers of asbestos products, who stand eventually to pay for a large share of the nation's asbestos abatement effort. According to Biechman, the alliance also has contacts with commercial real estate industry figures, who are warily eyeing proposals on Capitol Hill for broader abatement requirements.

SBA has long advocated "objective standards" in regulations governing asbestos response actions. The alliance argues that such standards – based on the number of asbestos fibers monitored in the air of a building – will protect the health of building owners while drastically curbing expensive asbestos removal projects.

The AHERA rule sets an asbestos standard of 0.1 fibers per cubic centimeter of air (f/cc) for air quality in school buildings after abatement projects – usually removals – are completed. But there is no such standard to guide when an abatement project should be initiated or what type of project should be conducted. Instead, the asbestos-in-schools rule requires visual inspections for friable asbestos and the judgment of trained abatement personnel to determine when asbestos materials should be removed, repaired, encapsulated, or merely monitored.

Supporters of a tough abatement approach caution that friable material will always continue to deteriorate and threaten to release fibers. Proper removal is the best – and permanent – solution to an asbestos problem, they say.

Risks of Abatement Cited

But SBA argues there is no evidence that extremely low levels of asbestos fibers in the air cause health problems. The alliance says a safe standard could be set. And the risks to building occupants from poorly performed removal projects, as well as the risks to abatement workers, outweigh the benefits of asbestos removal in many cases, SBA contends.

SBA also argues that there is a crucial defect to the approach of the AHERA rule because abatement inspectors and planners – who often work with or for abatement contractors – could have a vested interest in recommending the most elaborate and costly abatement projects.

The alliance says EPA could solve this problem – and save money – by setting standards for levels of asbestos in the air at which prescribed response actions should take place.

EPA sources have said one of the features of the new study of non-school buildings will be an assessment of asbestos levels inside 50 federal government buildings operated by the General Services Administration. The Safe Buildings Alliance

hopes that the results of this assessment will show that indoor asbestos levels are generally no higher than fiber levels outside the buildings. The alliance believes such a finding would support its call to curb asbestos removal efforts.

But in the wake of the new AHERA rule for schools, SBA isn't confident that its position on appropriate abatement responses will soon prevail. The alliance now seems to caution against quick action by Congress to set abatement requirements for non-school buildings.

Congress "should allow the AHERA regulations to be implemented and see whether they will have the [negative] effect we think they will," said William Lewis, of Morgan, Lewis & Bockius, Philadelphia, who is helping SBA to lobby on abatement regulation issues. The legislators should "take a wait-and-see attitude" before moving to adopt similar rules for other buildings, he said. □

COURT UPHOLDS SETTLEMENT IN GREENVILLE SCHOOLS CASE

An order that three former asbestos products manufacturers must abide by the terms of an out-of-court settlement reached in 1984 was upheld by the U.S. Court of Appeals for the Fourth Circuit Oct. 5. The settlement requires abatement cost recovery payments to four school districts located in South Carolina, Alabama, and Virginia.

The manufacturers had appealed the federal district court order, claiming the settlement was invalidated by the school districts' failure to give final approval before an agreed-upon deadline. But the appeals court found that the manufacturers delayed the districts' approval of the settlement by acting in bad faith during critical negotiations to determine which companies made products installed at the schools.

The settlement required the companies to establish a fund to pay for damages and asbestos abatement costs at some 140 school buildings. Payments by the companies were to be based on the amount of each manufacturer's products found in the schools and the cost of abatement actions. While the total amount to be paid to the districts hasn't yet been determined, plaintiffs' attorneys have called the settlement a "multi-million-dollar" agreement.

The case centers on asbestos claims brought by the Greenville County and Richland County school districts in South Carolina; the Montgomery County, Ala., Board of Education; and the School Board of Amelia County, Va.

The companies involved are U.S. Gypsum Co., W.R. Grace & Co., and National Gypsum Co.

The districts originally brought separate actions against a number of manufacturers. All the districts were represented by the Charleston, SC, law firm of Blatt & Fales, which specializes in asbestos property damage cases. In August 1984, the law firm arranged for settlement negotiations with the three manufacturers on behalf of all four districts. (One other district entered the negotiations but later dropped out.)

According to the Fourth Circuit's 23-page *per curiam* decision, an agreement between the school districts and the companies was executed in October 1984. The agreement tentatively required the companies to establish the settlement fund but

allowed the school districts a six-month period to study the issues and consider whether to accept the plan as a final resolution of their cases. The settlement also gave supervisory authority over the settlement process to the U.S. District Court for South Carolina – where the Greenville County School District brought suit in 1982.

In the following months, the settlement process broke down. Elaborate procedures had been agreed to that would allow the districts to identify the asbestos products in their buildings and calculate the payment owed by each company. The procedures included submitting invoices and other documents, producing testimony from architects, planners, and builders, or providing scientific analyses based on microscopy or other methods.

Products to Be Identified

Under the agreement, the companies weren't required to pay into the settlement fund until the school districts identified the products in their schools. After the districts produced product identification evidence, the companies were allowed to rebut the evidence. The parties were to attempt to resolve any disputes, but the agreement also provided for an arbitrator to step in if necessary. Finally, the agreement provided that if the companies failed to produce contrary evidence, the school districts' evidence on product identification would automatically be considered sufficient.

"Prompt submissions both of evidence by the school districts and of responses by the companies were critical to the operation of the settlement," the appeals court said. From January through April of 1985, the districts submitted voluminous product identification evidence.

The companies had begun their own product identification inquiries before the settlement discussions began, but they failed to present any of their evidence, the court said. After indicating they would dispute the districts' evidence and claims, "nevertheless [the companies] . . . did not seek negotiations to resolve the disputes. The companies produced no contrary product identification evidence for the school districts' review. Instead, they demanded additional evidence – much of which was not in the school districts' possession. The companies neither established a settlement fund nor contributed any money toward resolving the districts' claims."

A deadline of June 7, 1985, had been set for the districts to decide whether to accept the settlement, but the deadline passed without progress on the product identification issue. A month later, the school districts moved for specific performance of the settlement agreement. They argued that their product identification evidence should be considered sufficient because the companies had failed to produce contrary evidence. The only issue remaining was to fix the companies' abatement cost liability, the districts contended.

The district court held an evidentiary hearing and granted the school districts' motion on Nov. 4, 1985. U.S. District Judge William Wilkins found that the settlement agreement "constituted a binding contract." Under the contract, he said, the companies had an obligation to respond promptly on the product identification issue. Because they did not, he said, product identification was deemed established by the districts' evidence.

Wilkins then referred the abatement cost issue to arbitration under a procedure agreed to in the settlement.

Appealing Wilkins's order to the circuit court, the companies argued that the school districts didn't exercise their option to accept the settlement before the June 7 deadline. Thus, the districts allowed the agreement to expire before they moved for its performance, the companies said. The companies also argued that the original agreement specified no time limit to produce product identification evidence. They also challenged aspects of the court order limiting their ability to produce further product identification evidence or participate in nominating an arbitrator to settle further differences.

The school districts said they were prevented from exercising their option to accept the settlement before the deadline by the companies' refusal to produce product identification evidence. Under South Carolina law, they said, the companies forfeited any right to object to the school districts' delay in accepting the settlement.

The Fourth Circuit agreed with the school districts. Quoting Wilkins's original decision, the appeals court said: "Defendants [could not] force plaintiffs to reject the settlement by refusing to supply any contradictory evidence [on product identification], thereby depriving plaintiffs of the opportunity to make an informed decision whether to accept the settlement . . . Defendants may not seize upon their own dilatory conduct and unilaterally assert that the settlement agreement was terminated when the time to submit contrary evidence expired." The appeals court said Wilkins's decision was based on his "inherent equitable discretion" as a judge enforcing an agreement to settle litigation. Moreover, the parties had specifically agreed to grant the court authority to oversee the settlement procedures.

The appeals court also agreed with Wilkins on the substantive issue, concluding that "the companies breached their obligations under the agreement by acting in a manner that was inconsistent with a *bona fide* attempt to resolve product-identification disputes and with the implied duty of good faith and fair dealing . . . The record amply supports the conclusion that the companies breached both their specific and implied duties by steadfastly refusing to negotiate or otherwise respond meaningfully to the school districts' evidentiary submissions."

Reasonable Time Rule Applied

Although the original settlement agreement specified no time limit for the companies to produce their product identification evidence, "the courts of South Carolina . . . apply the traditional common law rule that, in the absence of express agreement, the time for actions to be taken under a contract is a reasonable time," the appeals court said. The court added that the settlement agreement provided "a reasonable calendar for the execution of product identification procedures."

Considering the time in pre-trial discovery before the settlement discussions began, the companies had adequate time to assemble and submit product identification data, the appeals court said. The companies also had time to participate in nominating an arbitrator under the terms of the settlement agreement but failed to do so, the court said.

Finally the appeals court dismissed the companies' argument that a telephone conversation between the school districts' attorney and Judge Wilkins concerning the status of the settlement was improper. The judge was acting as supervisor of the settlement, and participation in the conversation did not require him to recuse himself from the case.

In a related action consolidated with the principal appeal, the court turned down the Greenville County School District's appeal for an added award of prejudgment interest on a separately settled claim against U.S. Gypsum. The school district received interest from the date it informed U.S. Gypsum of the claim, but the district asked the appeals court to award interest from the time it paid to have U.S. Gypsum's asbestos products removed from a school.

The appeals court ruled that, under South Carolina law, the district was entitled to interest from the time its claim was "liquidated." The court ruled further that the claim was not liquidated until the district specified the amount and extent of recovery sought against U.S. Gypsum, which was one year after the district paid a contractor to remove the asbestos products from the school.

The three-judge panel issuing the ruling included U.S. Circuit Judges James Phillips and James Sprouse and U.S. District Judge for Eastern North Carolina Terrence Boyle, sitting by designation. (*Greenville County School District v. U.S. Gypsum Co.*, CA 4, No. 85-2169) □

JOB SAFETY RULES FOR ASBESTOS 'MINIMAL,' OSHA OFFICIAL SAYS

CHICAGO – Describing the Occupational Safety and Health Administration's final rules for asbestos as "minimal," an agency official recommended that employers go beyond those requirements to protect workers from exposure.

At an Oct. 5 session of the National Safety Congress, Jack Janda, special assistant regional administrator for state and federal programs for OSHA Region 5, said that employers have "moral and legal" obligations beyond requirements established by his agency.

"If I had any employees who were coming into contact with asbestos, they would automatically be part of my medical surveillance program," Janda said.

He also recommended that employers periodically sample air levels of asbestos, even if previous readings have indicated levels to be below the action level.

OSHA's standards, published in June 1986, set a permissible exposure limit for fibrous asbestos of 0.2 fibers per cubic centimeter of air (f/cc) and a 0.1 f/cc action level. When asbestos at a worksite is measured at or above these levels, employers must provide workers with medical surveillance, exposure monitoring, and other protections. The agency's rules cover the asbestos abatement industry, the construction industry, and other employers.

The agency will be amending the construction industry standard for asbestos to include hazard communication provisions – such as labeling, material safety data sheets, and training requirements – Janda said. The upcoming amendment is the result of a May federal appeals court order that the agency ex-

pand its hazard communication standard to cover all industries.

Currently, hazard communication provisions in the construction industry standard require only that employers notify other contractors at the worksite of the presence of asbestos and the requirements of OSHA's standard, Janda said.

Taking questions after his remarks, Janda said he "strongly disagreed" with a comment from the audience that asbestos is not as hazardous as was previously thought. He dismissed the view that efforts to tighten regulation of the mineral have been fueled by E.I. du Pont de Nemours and Co., which produces an asbestos substitute, and by organized crime, which profits from its asbestos removal operations.

Asbestos is a "potent carcinogen" whose hazards have been well documented, Janda said, and there is no safe level of exposure to the substance. □

TEACHERS CLOSE SCHOOL, FORCE CLEANUP IN NEW YORK

A group of teachers in New York City appears to have succeeded in an attempt to require the city's board of education to act immediately to clean up asbestos in a Brooklyn high school.

On Sept. 23, a New York state judge, responding to a lawsuit brought by the teachers, ordered the board to remove asbestos from Clara Barton High School. A board spokesman told AAR that officials have set Nov. 9 as the date for completion of the abatement project and reopening of the school.

The school didn't open for the current school year because of an injunction issued by the state court in response to an earlier motion by the teachers' group, according to Glen Rubenstein, a New York City Council staffer.

Rubenstein is an aide to Councilwoman Ruth Messinger, an ally of the teachers' group. He told AAR Oct. 14 that problems at Clara Barton High School began more than two years ago, when the board of education initiated a major building renovation project. Rubenstein said the renovation was part of a larger project to upgrade all of the city's deteriorating school facilities.

The board's specifications for renovating Clara Barton High School didn't identify much of the asbestos-containing material in the school, Rubenstein said. The board "essentially claimed there was no asbestos" where the asbestos materials were later found, he said. The renovation plans also left it to the renovation contractor to determine what protective measures to take with regard to asbestos, he added.

But the renovation project, conducted while classes were being held, appeared to teachers to be creating "major health problems" – including large amounts of dust in the air – Rubenstein said. The teachers became especially concerned about the possibility that asbestos was being disturbed, he said. The board "ignored the problem."

After Clara Barton formed a committee to monitor the renovation problems, and last summer the committee hired its own consultant to inspect for asbestos materials at the school. According to Rubenstein, the consultant's report said asbestos-containing materials were found in many areas where the board had said they weren't present, and contrary

to the board's claims, there was asbestos contamination in the air at the school.

When discussions failed to resolve the situation, the teachers took the board to court last summer and received the closure and cleanup orders. The board initially planned to leave the school closed for the fall semester, but teachers and parents said the pace of the asbestos cleanup was too slow. Concerns were heightened by the fact that teachers and students were divided and reassigned to four other locations during cleanup of the Clara Barton school.

In his ruling Sept. 23, New York Justice Gerald Held ordered an abatement contractor hired by the board to assign 40 workers in double shifts six days a week to remove asbestos from the high school. □

DOCTOR FINDS ASBESTOS IN LUNGS OF MANY INFANTS

New studies of asbestos exposure have revealed that asbestos fibers may lodge in the lungs of a surprisingly high number of infants, a pathologist at the University of Texas Medical Branch in Galveston, Tex., has reported.

Dr. Abida Haque told AAR Oct. 16 that most pathologists have considered asbestos exposure an adult phenomenon related to occupational handling of the material. Before her studies, Haque said, there were no data on asbestos in the lungs of children, and "people presumed" that it wasn't present.

The infants she studied had died of causes unrelated to asbestos, but autopsies revealed small numbers of asbestos "bodies" in the lungs of several of the children. Asbestos bodies are fibers that have lodged in the lungs and have been coated with tissue.

Her discovery means "all of us are probably inhaling asbestos and other fibers . . . much more than we think," Haque said. "Fibers may begin to collect in the lungs at a very early age," she added. Another conclusion, Haque said, is that the lungs of 100 percent of adults probably would show some evidence of inhaling asbestos fibers.

Because infants couldn't have been occupationally exposed to asbestos, they must have been exposed to the fibers from an environmental source. But Haque said she had no data on the source of exposure.

Sudden Infant Death Syndrome

Another important and unexpected finding was that the lungs of babies who had died of the mysterious Sudden Infant Death Syndrome (SIDS) were much more likely to contain asbestos bodies than the lungs of babies who had died of other causes.

SIDS — also called "crib death" — is the death due to unknown causes of an infant in apparently good health, usually during the first year of life.

In her first study, conducted in 1984, Haque examined 17 infants, 10 of whom had died of SIDS. Five of the SIDS babies had asbestos bodies in their lungs, while only one of seven infants who had died of other causes showed this result.

Last year, Haque conducted a larger study on the lungs of 46 infants. Again, approximately 50 percent of the 15 SIDS in-

fants examined had asbestos bodies in their lungs, she said. Only three of the other 31 infants had asbestos bodies.

Interestingly, she said, the three non-SIDS babies that had asbestos bodies all had died of a respiratory disorder and had been placed on a respirator before death. Haque said she was not sure if the respirator had something to do with the presence of asbestos.

Haque said she was "still not sure" what the presence of asbestos in a large number of SIDS infants means. But she said she didn't believe asbestos contributed to the deaths. She hypothesized that the asbestos bodies indicated that the SIDS babies "were not able to clear their lungs" as readily as other infants who eject inhaled asbestos fibers.

She said, however, that she couldn't rule out the possibility that the SIDS babies "could have been exposed to an atmosphere with lots of pollution" that contributed to their condition.

Haque published in 1985 the results of her initial study and presented the results of last year's research to a medical conference. She said her latest results will be published later this year. □

EPA PROPOSES SCHOOL PENALTIES FOR RECORDS, NOTICE VIOLATIONS

PHILADELPHIA — The Environmental Protection Agency has proposed penalties of \$19,300 against the Blairsville-Saltsville School District in Pennsylvania and \$6,000 at Riverdale Baptist School in Upper Marlboro, Md., for violation of asbestos rules, the EPA's Region 3 office announced Oct. 7.

In the Pennsylvania case, the agency alleged violations of recordkeeping requirements at three schools and the central school district office in Blairsville, Pa., and violation of notification requirements at the Saltsburg Elementary School.

In the Maryland case, EPA said an inspection at Riverdale Baptist School disclosed violations of inspection, recordkeeping, sampling, analysis, and compliance certification requirements.

The agency charged the schools with violations of the 1982 asbestos-in-schools rule that was promulgated under the Toxic Substances Control Act. The rule requires inspection and sampling of friable materials in schools; notification of parents, faculty, and staff when asbestos materials are found; distribution of "A Guide To Reducing Asbestos Exposure" to custodial and maintenance personnel; and maintenance of records at each school and at school district central offices. Materials containing friable asbestos must be encapsulated, enclosed, or removed to prevent release of asbestos fibers into the air. □

WASHINGTON-AREA FIRM CITED FOR ASBESTOS NESHAP OFFENSES

The Environmental Protection Agency has filed suit against two firms charging violation of regulations governing the removal of asbestos from buildings in Washington, DC, and suburban areas of Maryland and Virginia.

The complaint filed in U.S. District Court for the District of Columbia against Martin O. Sandige and the two compa-

nies he heads seeks penalties of \$25,000 per day for multiple alleged violations between July 1985 and March 1987 and violation of an administrative order issued Dec. 13, 1985. The companies named in the suit are M.O. Sandidge Inc. and Unity Construction Inc. Sandidge is president of both firms, EPA said.

The violations involve "multiple inadequate notices" of asbestos removal due to building renovations or demolition, EPA said. The suit cites "significant inadequacies" in the mandatory notices required under the National Emission Standards for Hazardous Air Pollutants (NESHAP).

NESHAP requires asbestos removal from any renovated or demolished building if the building contains more than 260 linear feet of asbestos pipe insulation or 160 square feet of asbestos surfacing material. EPA must be notified in advance of asbestos removal due to building renovation or demolition.

"The notices to EPA must contain certain specified information, including . . . the location of the asbestos removal site, the amount of asbestos to be removed, and procedures for removal," EPA said. (*U.S. v. Sandidge*, DC DC, No. 87-2386)□

UK STUDY SHOWS LOW LEVELS OF ASBESTOS IN BUILDINGS' AIR

Asbestos fiber concentrations in 39 asbestos-containing buildings never reached more than 0.002 fibers per cubic centimeter of air (f/cc) and were below 0.001 f/cc in all but two cases, according to results of a new British study cited by representatives of the asbestos products industry.

The study, conducted by British government researcher G.J. Burdett, was sent to the Environmental Protection Agency Oct. 14 by Lawrence Hoyle of Hoyle, Morris & Kerr, Philadelphia. Hoyle represents former asbestos manufacturer National Gypsum Inc. Hoyle asked that Burdett's report be included in the rulemaking record of a final Asbestos Hazard Emergency Response Act rule.

Burdett presented his study last month at a seminar in Lyons, France, sponsored by the International Agency for Research on Cancer, a branch of the World Health Organization.

Hoyle wrote to EPA Administrator Lee Thomas that Burdett's work "confirms the ultra-low concentrations of asbestos in the air in buildings before removal and provides new data on elevated exposures during and after removal."

Burdett's findings were based on electron microscope analysis of air samples, a technique recommended by EPA in the proposed AHERA rule. The 0.002 f/cc level is 100 times less than the U.S. Occupational Safety and Health Administration's permissible limit for occupational exposure to asbestos.

Burdett also found that asbestos removal "poses significant risks not only to removal workers but also to persons who may be exposed outside the containment area during removal or in the building following removal," according to Hoyle's letter.

The study indicated asbestos fibers may leak from enclosed abatement work areas and that fibers may linger in the air of a building for months after a removal project is complete. Asbestos in the air outside one abatement containment area was

measured at a level of 0.29 f/cc, according to the study, and elevated asbestos levels were measured as long as 10 months after completion of asbestos removal.

"At some point, there is a cost-benefit advantage for the removal of asbestos," Burdett wrote in the report on his study. He said this point may be where "continuous management of a building becomes more expensive than removal." He recognized also that determining a response action "will invariably depend on a number of unquantifiable factors," including perception of risk, problems with sale or lease of a building, and discontent among the building's occupants.

'Manage, Not Remove'

But Burdett concluded that, "on balance, management rather than removal would appear to give the lowest risk at present, especially if the asbestos material is in good condition and has little physical disturbance."

Hoyle urged Thomas to consider Burdett's findings in formulating the AHERA rule. "[I]f the aim of the regulation is to protect human health and the environment by minimizing exposures to airborne asbestos, then abatement must be discouraged unless airborne levels during normal occupancy are abnormally high."

Asbestos manufacturers, who have been sued by building owners for recovery of abatement costs in many instances, have consistently pressed EPA to use its regulatory authority to curb asbestos removal.□

FEDERAL COURT DISMISSES SUIT FOR CLEANUP OF ASBESTOS WASTE

A landowner's claim under the federal Superfund law to recover the cost of cleaning up asbestos waste dumped on property by a previous owner was dismissed Sept. 21 by the U.S. District Court for Middle Pennsylvania.

The case centered on a 160-acre tract of land bought in 1963 by an investment company owned by Smith Land & Improvement Corp. A seller of the land, Philip Carey Manufacturing Co., was later acquired by Rapid-American Corp., the defendant in the case. Another original seller was acquired by The Celotex Corp., which Smith Land named in a separate, identical suit.

The plaintiff alleged that, prior to the land sale, the Carey Company dumped large amounts of waste on the conveyed property. The waste remained there until 1984, when the U.S. Environmental Protection Agency informed Smith Land that the waste contained hazardous asbestos. EPA ordered Smith Land to clean up the property at its own cost.

EPA issued the order under authority of the Superfund hazardous waste law – the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) – which gives the agency broad powers to order "responsible parties" to conduct cleanups.

Smith Land "spent substantial sums of money" to complete the cleanup, according to Judge Edwin Kosik's nine-page opinion. Subsequently, Smith Land attempted to use a "private cause of action" provision of the Superfund law to seek reimbursement for the cleanup from Rapid-American. Smith Land

also sought to recover under state common law claims and a claim for restitution based on unjust enrichment.

In dismissing Smith Land's claims, Kosik relied on a "dispositive" recent decision by the U.S. Court of Appeals for the Third Circuit in *Philadelphia Electric Co. v. Hercules Inc.*, 762 F.2d 303 (CA 3, 1985). In that case the appeals court ruled against a plaintiff seeking to recover money spent on a groundwater and surface water cleanup ordered by the state under Pennsylvania's Clean Streams Law.

The appeals court said that the law in Pennsylvania "is that in the absence of fraud or misrepresentation a vendor is responsible for the quality of property being sold by him only to the extent for which he expressly agrees to be responsible."

In general, the rule of *caveat emptor* applies, Kosik said, "especially where . . . the dispute is over a condition on the land rather than a structure."

Smith Land, however, attempted to distinguish its federal Superfund claim from the state claims examined in the *Philadelphia Electric* case.

But while Smith Land was ordered to clean up its property by a federal agency under the federal law, Kosik said, "the plaintiff has not cited a single case which makes a distinction between a cleanup action initiated under CERCLA as opposed to the Pennsylvania Clean Streams Law."

"The EPA in the present case could have proceeded against either the plaintiff or the defendant," Kosik said. "However, this fact has nothing to do with the plaintiff's right as present landowner to recover from the defendant as former landowner the costs of the cleanup."

The defendant never attempted to conceal the presence of the asbestos waste on the land purchased by the plaintiff, Kosik said. Smith Land was a "sophisticated and responsible purchaser," he added, and was aware of such conditions on the property as quarry holes and a 30-foot-high pile of waste material covering 20 acres. Moreover, he added, "It is clear that the price the plaintiff paid for the land reflected the possibility of environmental risks." Smith Land, however, took no precautions in its sale agreement respecting future cleanup costs.

Smith Land argued that "it was neither involved in asbestos in any way nor was it aware that asbestos was a hazardous material before being so informed by the EPA in 1984." The company contended further that "it was not a sophisticated purchaser with regard to asbestos" and "could not have considered the cost of future cleanup when it purchased the land."

However, Kosik said, Smith Land had inspected the property five times before purchasing and was well aware of the 20-acre waste pile on the land.

No Unjust Enrichment

The judge also dismissed Smith Land's unjust enrichment claim, finding that "the defendant was not enriched just because the government brought an enforcement action against the plaintiff instead of the defendant." Both Smith Land and Rapid-American were liable for the asbestos cleanup under the Superfund law, Kosik said. "However, just because the EPA chose the plaintiff to do the cleanup work, does not mean the defendant was enriched."

Kosik added that there was no injustice "if the [contamina-

tion] was obvious at the time of the land sale and the prior landowner did not attempt to conceal the condition."

Writing that "the facts of this case are identical" to those of the case against Rapid-American, Kosik dismissed the case against Celotex in a brief, three-page opinion. (*Smith Land & Improvement Co. v. Rapid-American Corp.*, DC MPa, No. 86-0116; *Smith Land & Improvement Co. v. The Celotex Corp.*, DC MPa, No. 86-1151)□

SENATE SUPPORTS CONTINUED ASHAA FUNDS FOR FISCAL 1988

The Senate approved Oct. 15 an Environmental Protection Agency funding bill for fiscal 1988 that would continue a \$50 million annual federal spending commitment for asbestos abatement assistance loans and grants for the nation's schools.

The abatement provision was identical to a provision approved Sept. 22 by the House for assistance under the Asbestos School Hazard Abatement Act (AAR, Oct. 5, p. 1).

The Senate version of the funding bill (HR 2783) contains a total of \$5.3 billion for all EPA programs. The bill also funds 17 other federal agencies. It moves next to a House-Senate conference committee.□

AHERA Rule, from p. 1

Transmission Electron Microscopy (TEM) analysis. Completion of abatement projects analyzed by TEM will be gauged by comparison of indoor and outdoor samples, EPA said.

The agency included these provisions despite protests from Rep. James Florio (D-NJ) and others who said the more precise TEM analysis should be required sooner and standards for clearance of completed abatement projects should be stricter.

Michael Stahl, chief of EPA's Asbestos Action Program, told AAR that Administrator Lee Thomas signed the AHERA rule on Oct. 17, meeting a deadline Congress set when it passed the law last year. An EPA spokesman said the final rules would be published soon in the *Federal Register*.

In an analysis of AHERA's economic impact, EPA said nearly 45,000 schools nationwide have an estimated 213 million square feet of asbestos surfacing materials or thermal insulation requiring strict management under AHERA. The agency said all the estimated 107,500 elementary and secondary schools in the country probably have some amount of non-friable asbestos materials, such as floor tile.

EPA has estimated the total cost of compliance with AHERA for these schools will be \$3.2 billion, but this has been disputed by many school officials who believe inspections, management, and abatement projects will be much more expensive than EPA has said.

Under the final rules:

- An accredited inspector must visually inspect all areas of each covered school to identify and locate all asbestos-containing materials. A school may be excluded from inspection if a previous inspection indicated the school was asbestos-free, if the school is built after October 1988 and is certified asbestos-free, or if records indicate all asbestos was removed.
- All asbestos materials left in place must be monitored by school maintenance personnel every six months and must

receive a full reinspection every three years.

- School districts and private school systems must ensure that asbestos management plans for each of their schools are developed by an accredited management planner. The plans must describe inspections and abatement responses and certify that accredited persons were used to inspect, plan, and design or conduct abatement projects. Plans must be submitted by Oct. 12, 1988, to a designated state agency, which has 90 days to review them. School officials must begin to implement these plans by July 9, 1989. Parents and teachers must be notified each year of the availability of the plans.

- All abatement personnel, including abatement contractors and workers, must be trained and accredited according to the requirements of EPA or the state where the abatement work is taking place. Each state must adopt an accreditation program at least as stringent as EPA's Model Accreditation Plan issued in April (AAR, June 1, p. 3). Some personnel may receive "interim accreditation" if they have taken a suitable training course since Jan. 1, 1985.

- School maintenance and custodial workers will be covered by the Occupational Safety and Health Administration's asbestos standard, which consists of a permissible exposure limit (PEL) of 0.02 f/cc and an action level of 0.01 f/cc. All occupants will be protected by requirements for restricted areas, posted signs, and controls on air movement when any operation and maintenance activity disturbs asbestos materials.

Finally, any state with an asbestos inspection and management program at least as stringent as the AHERA program may waive some or all of the rule's provisions.

EPA to List Training Courses

In addition to the rules, Stahl told AAR his office is preparing to issue a list of approved courses that will train and test abatement personnel. He has also promised to issue a list of states with approved accreditation programs. While some states have been reviewed under this provision, progress has been slow, Stahl acknowledged.

EPA and the states are under immediate pressure to approve training and accreditation procedures since none of the work called for under AHERA can proceed unless conducted by accredited people. Lists of approved courses and state programs will be continually updated, Stahl said.

EPA also announced that it is awarding \$5 million in new grants to aid development of inspection and management plans and \$1 million in grants for state accreditation programs. Recipients were not immediately named. □

CONFERENCES, COURSES

Oct. 27-30, Kansas City, Mo. – Third Annual Asbestos Abatement Conference and Exhibition. (Kim Heck, Hall-Kimbrell Environmental Services Inc., 4840 W. 15th St., Lawrence, Kan. 66046; (800) 445-0682.)

Oct. 29-30, Reno, Nev. – Asbestos Medicine Seminar, sponsored by the Defense Research Institute and Trial Lawyers Association. (Defense Research Institute, Seminar Department, Suite 500, 750 N. Lake Shore Dr., Chicago, Ill. 60611; (312) 944-0574.)

Nov. 10-13, Kansas City, Mo. – Practices and Procedures in Asbestos Control. (Lani Himegarner, National Asbestos Training Center, University of Kansas, 5005 W. 95th St., Shawnee Mission, Kan. 66027; (913) 648-5790.)

Nov. 11-20, Philadelphia – Asbestos Hazard Evaluation and Abatement Workshop. (L. Lavin or M. Benarde, Temple University, Computer Sciences and Architecture, 12th & Norris Sts., Philadelphia, Pa. 19122; (215) 787-6497.)

Nov. 16-18, Philadelphia – Asbestos in Buildings Inspector Course. (Lester Lavin or Melvin Benarde, Temple University, Computer Sciences and Architecture, 12th & Norris Streets, Philadelphia, Pa. 19122; (215) 787-6497.)

Nov. 16-20, Philadelphia – Asbestos Hazard Evaluation and Abatement Workshop. (Drexel University, Continuing Professional Education, 32nd & Chestnut Streets, Philadelphia, Pa. 19104; (215) 895-2156.)

Nov. 17, St. Paul, Minn. – Asbestos Awareness. (Regina Hoffman, Minnesota Safety Council, 555 Wabasha St., Suite 102, St. Paul, Minn. 55102; (612) 291-9150.)

Nov. 17-20, Albuquerque, NM – Hands-On Asbestos Control Procedures. (Lani Himegarner, National Asbestos Training Center, University of Kansas, 5005 W. 95th St., Shawnee Mission, Kan. 66027; (913) 648-5790.)

Nov. 30-Dec. 4, Salt Lake City, Utah – Sampling and Evaluating Airborne Asbestos Dust. (Connie Crandall, University of Utah, Building 512, Salt Lake City, Utah 84112; (801) 581-5710.)

Dec. 7-10, Phoenix, Ariz. – Hands-On Asbestos Control Procedures. (Lani Himegarner, National Asbestos Training Center, University of Kansas, 5005 W. 95th St., Shawnee Mission, Kan. 66027; (913) 648-5790.)

Dec. 8-11, Cincinnati, Ohio – Safe Methods of Asbestos Removal. (University of Cincinnati, Office of Continuing Education, Department of Environmental Health, Cincinnati, Ohio 45267-0056; (513) 872-5733.)



ASBESTOS ABATEMENT REPORT

Corby Anderson, Managing Editor; Kenneth P. Doyle, Faton A. Bacaj, Melissa A. Hunter-Killmer;
Atlanta: Barney Tumey; Cincinnati: Bebe Raupe; Los Angeles: Stephen Sicillano; New York: Craig Mellow;
Philadelphia: Neil Gilbride; San Francisco: Arthur O'Donnell, Glenn Totten

Copyright © 1987 BURAFF PUBLICATIONS, INC., A subsidiary of THE BUREAU OF NATIONAL AFFAIRS, INC.

Stanley E. Degler, President

George H. Lesser, Publisher

Elizabeth Early, Operations Manager

Published 26 times a year at Washington, DC, by Buraff Publications, Inc., 2445 M St. NW, Suite 275, Washington, DC 20037.

(202)452-7889. Price: \$327

Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by The Bureau of National Affairs, Inc., for libraries or other users registered with the Copyright Clearance Center (CCC), provided that the base fee of \$0.50 per page is paid directly to the Copyright Clearance Center, 27 Congress St., Salem, Mass. 01970, or to The Bureau of National Affairs, Inc. 0893-858X/87/\$0+.50.

Fact Sheet
Final Rule: Asbestos-Containing Materials in Schools
Asbestos Hazard Emergency Response Act (AHERA)

On October 22, 1986, President Reagan signed into law the Asbestos Hazard Emergency Response Act (AHERA) of 1986 (PL99-519). Under AHERA, the Environmental Protection Agency (EPA) is directed to promulgate regulations which provide a framework for addressing asbestos problems in public and private elementary and secondary schools. The proposed rule was published on April 30, 1987 and the final rule will be issued on October 17, 1987, in accordance with the statutory deadline. The rule requires schools to inspect buildings, develop management plans and implement response actions.

Inspections

- The rule requires an accredited inspector to visually inspect all areas to identify location of all asbestos-containing materials (ACM) - both friable (easily crumbled) and non-friable.
- Exclusions: An initial inspection of portions of the school or the entire school is unnecessary if:
 1. an accredited inspector has determined that a previous inspection identified ACM or indicated no ACM was present;
 2. the school is built after October 12, 1988 and an architect or project engineer or accredited inspector signs a statement indicating that no ACM was specified for use in construction documents;
 3. a school's inspection and abatement records indicate that all ACM was removed.

Reinspection and Periodic Surveillance:

- Local Education Agencies (LEAs) will be required to monitor ACM left in place.
- Periodic surveillance requires checking ACM every six months to determine if its condition has changed since the last inspection or surveillance.
- LEA may use unaccredited personnel (custodian or maintenance workers) to perform periodic surveillance activities.
- Re-inspection is required every three years, to re-assess the ACM and must be conducted by an accredited inspector.

Management Plans

- LEAs are required to develop an asbestos management plan for each school under their administrative control.
- Plan must be developed by an accredited asbestos management planner.
- Plan must include a description of inspection and response actions; an assurance that accredited persons were used to conduct inspections, develop management plans, and design or conduct response actions; and a plan for reinspection and operations and maintenance.
- LEAs are to submit their management plans to their State on or before October 12, 1988. The state has 90 days to disapprove the plan. The LEA is allowed 30 days to review its plan to conform with the State's changes.
- Each LEA must begin to implement its plan on or before July 9, 1989.
- LEAs must notify in writing parent and teacher organizations annually about the availability of the plan.

Response Actions

- AHERA directs the LEA to select and implement appropriate response actions for ACM which was assessed by the accredited inspector.
- The five major response actions include: operations and maintenance (O&M), repair, encapsulation, enclosure and removal. The rule describes appropriate circumstances for selecting each response action as well as steps which shall be taken to properly conduct the response actions. Response actions must meet the statutory standard -- protect human health and the environment.
- Successful completion of response actions is determined by air sampling. For two years after effective date of rule Phase Contrast Microscopy (PCM) clearance at .01 f/cc is acceptable for projects of 3,000 square feet or 1,000 linear feet or less. Transmission Electron Microscopy (TEM) is required for these projects after two years. For an additional year, PCM is permissible for clearance of 1,500 square feet or 500 linear feet or less, then TEM would be required for these projects. TEM clearance is accomplished through analysis and comparison of indoor and outdoor samples.

Use of Accredited Persons

- LEAs shall use accredited persons to inspect for ACM in school buildings, prepare management plans for schools, and design or carry out response actions with respect to ACM in schools.
- As required by AHERA, EPA issued a final Model Contractor Accreditation Plan on April 20, 1987. According to AHERA, each state must adopt a contractor accreditation program at least as stringent as the EPA Model Plan. Persons can receive accreditation from a State that meets the requirements of the EPA Model, or by taking an EPA-approved training course and exam.
- The Model Plan requires persons seeking accreditation to take an initial training course, pass an examination and participate in continuing education.
- AHERA enables EPA to permit persons to be grandfathered into the accreditation system for an interim period if they had attended prior EPA-approved asbestos training and passed or pass an asbestos exam. These provisions apply only to persons who have taken a suitable training course since January 1, 1985. The interim accreditation is for only 1 year after the date on which the State where the person is employed establishes an accreditation program at least as stringent as the EPA Model.

Worker and Occupant Protection

- AHERA extends coverage of the EPA Worker Protection Rule (40 C.F.R., Part 763) to maintenance and custodial personnel in schools who are not covered by OSHA's construction standard or approved State OSHA programs.
- LEAs are required, through air monitoring procedures or historic air monitoring data, to document and assure that the Permissible Exposure Limit (PEL) of 0.2 f/cc has not been reached or to implement proper protection practices to control exposure when the action level of .1 f/cc is met.
- LEAs may choose to institute the provision of Appendix B of the act in the case of small-scale, short duration projects rather than comply with the full EPA worker protection rule.
- Basic occupant protection requirements are established for any O&M activity in a school which disturbs ACM including restricted areas, posted signs and modified air movement outside of the area.

Waiver for State Program

- States may receive a waiver from some or all of the requirements of the proposed rule if the State has established and is implementing or intends to implement a program of asbestos inspection and management at least as stringent as the requirements of the proposed rule.

10/19/87

- QUESTIONS AND ANSWERS -
FINAL REGULATIONS - ASBESTOS HAZARD EMERGENCY
RESPONSE ACT OF 1986 (AHERA)

1.) What does AHERA require schools to do about asbestos?

The AHERA regulations require all public and private elementary and secondary schools to inspect buildings for friable (i.e., crumbled to powder under hand pressure) and nonfriable asbestos-containing materials (ACM), develop management plans and submit them to their State Governor or a designated State agency, and implement response actions to reduce asbestos exposure. Schools are required to use accredited persons for these activities.

2.) Are there any deadlines for these activities?

Congress set deadlines in the AHERA legislation for these activities. EPA's regulations reflect the deadlines established by Congress. Schools must complete their inspections and submit their management plans by October 12, 1988. States have 90 days to review and disapprove the plans. Schools must begin implementation of their plans by July 9, 1989. There is no deadline for completion of response actions.

3.) Do schools which have previously inspected their buildings have to inspect again?

This varies according to the individual circumstances at the school. Exclusions can be granted from the AHERA inspection requirements for previous inspections which were done properly. Most schools which have inspected did not check for nonfriable materials and will now be required to do so under the AHERA regulations.

4.) Do the regulations require schools to remove ACM?

No. The regulation requires schools to choose a response action which protects human health and the environment. The range of response actions the school can choose depends on the condition of the ACM. The response action is chosen by the school with the assistance of the accredited management planner. A school may choose to remove ACM if removal is the preferred response action.

5.) How many schools will be affected by the regulation and what is the cost of the regulation?

About 107,000 schools in over 40,000 school districts will be affected in some way by the requirements. Some schools have little remaining work to do to meet the requirements, other schools which have not even inspected could have many tasks ahead of them. The cost of the

regulation will vary according to the circumstances in the school, but EPA estimates the average cost of conducting inspections and developing management plans to be \$3,600 for a public secondary school. Response action costs will vary depending on the response action chosen. EPA estimates that about 46,000 schools will implement response actions (removal, enclosure, encapsulation or operations and maintenance) over a 30 year period and at an average cost of \$40,000. The total cost of the regulation over a 30 year period will be about \$3.1 billion.

- 6.) What has EPA done to ensure that there will be enough accredited persons to perform the AHERA work?

One of the challenges of AHERA implementation will be training and accrediting a cadre of inspectors, management planners, and abatement contractors. The combination of existing or newly developing state programs plus EPA-approved training courses should supply a sufficient number of accredited persons.

EPA has done the following ...

- reviewed and approved more than 40 courses for accreditation of inspectors, management planners, and contractors -- these courses will be listed in Federal Register when rule is published
- developed a model inspector/management planner course for use by state accreditation programs and other training providers
- prepared grant awards for 17 states to fund new program to train and accredit inspectors and management planners (These will be awarded as soon as FY 88 appropriation is received)

- 7.) Are there any funds available to assist schools?

EPA has issued a total of \$5 million in grants to 12 states to help schools pay for inspections and management plan development required by AHERA. Under the Asbestos School Hazard Abatement Act of 1984 (ASHAA), EPA has issued about \$134 million in grants and loans to schools for asbestos abatement over the last three years. At this time, Congress has not completed the 1988 appropriation process, so availability of further funds is not clear.

- 8.) What will EPA do to promote compliance with this regulation?

EPA will be mailing the regulations and a guidance document to over 40,000 public school districts and private schools in the next few weeks. A teleconference for school administrators is also being planned. EPA will immediately begin a compliance outreach program designed to respond to LEA's of their compliance responsibilities under the AHERA regulations. EPA will also conduct inspections of LEA's and schools to assure compliance with AHERA.

- 9.) Will EPA continue to conduct compliance inspections for the 1982 school inspection rule after the effective date of the AHERA regulations?

No.

- 10.) When will EPA begin to inspect for violations of AHERA regulations?

Compliance inspections for the AHERA regulations will start on October 12, 1988, the statutory deadline for submission of management plans by the schools.

- 11.) Will EPA impose the statutory civil penalty of \$5,000 per day for each violation of AHERA?

A civil penalty of \$5,000 per day per violation is the maximum allowable civil penalty. AHERA also provides that the actual civil penalty assessed must reflect the significance of the violation, the culpability of the violator (including previous history of violations under AHERA), the ability of the violator to pay the penalty, and the ability of the violator to continue to provide educational services to the community. AHERA specifies that fines assessed against schools are to be used by the school for the purpose of asbestos abatement in that school. Residual amounts of fines are to be added to the Asbestos Trust Fund. AHERA also contains provisions for assessing criminal penalties of up to \$25,000 per day.

- 12.) What will schools be required to do regarding transport and disposal of asbestos waste?

EPA had planned to use revised final regulations issued under the National Emission Standards for Hazardous Air Pollutants (NESHAP) of the Clean Air Act to provide requirements for transport and disposal of asbestos from schools. Unfortunately, revised NESHAP regulations have not been completed and, as specified in Section 204 of AHERA, the EPA publication "Asbestos Waste Management Guidance Document" is now in effect for transport and

disposal of asbestos waste. (This document is in addition to existing Department of Transportation and NESHAP regulations.) EPA will soon issue proposed revised NESHAP regulations to supersede the guidance document.

13.) What are states required to do under AHERA?

First, states are required to notify schools by October 17, 1987 regarding where school management plans are to be submitted. Second, states may review and disapprove plans within 90 days of receipt from schools. (If states do not disapprove plans, the plans are implemented.) Finally, states are required to establish accreditation programs.

QUESTIONS FOR INTERNAL USE

- Q. Why has EPA not issued the study of asbestos in public and commercial buildings?
- A. AHERA requires EPA to assess the presence and condition of asbestos in public and commercial buildings, evaluate existing regulations on asbestos, and make recommendations about the need for further action. The study directs EPA to advise Congress and the nation about a major public policy question -- what, if anything, should be done about the estimated 733,000 buildings which contain asbestos?

The Agency is giving very careful attention to this study and, quite simply, more time is necessary to produce a report that will contribute to a responsible public discussion of this question. The report is currently undergoing internal review by various EPA offices. We expect to issue the report in a few weeks.

- Q. What were the major changes in the final rule compared to the April proposal?
- A. Most of the changes were for clarification, others to enhance public notification or enforcement.
- changed response action section to emphasize that response actions must protect human health and environment -- then least burdensome method can be selected from among response actions which protect human health and environment
 - expanded definitions of damage and significant damage by adding more description of characteristics which indicate damage
 - changed notification of parent and employee organizations to require written notification
 - added requirement for management planner to make a recommendation to LEA about the need for additional cleaning
- Q. Has EPA appointed an asbestos ombudsman?
- A. EPA plans to appoint an ombudsman by the time the AHERA regulations go into effect in late November. An interim ombudsman is available to respond to public inquiries. The interim ombudsman can be reached at (202) 544-1404.

- Q. Will EPA issue civil penalties for first-time violations of AHERA, or will notices of Noncompliance (NON's) be issued for first-time violations as was done under AIS?
- A. EPA plans to issue civil penalties for violations of AHERA. Congress set the compliance deadlines in the AHERA legislation, and EPA believes Congress intended these dates to be fully enforced.
- Q. Has the Agency adopted an air monitoring standard to guide schools in assessing the asbestos hazard in their buildings?
- A. EPA continues to believe that an air monitoring standard is not viable as the method for assessing asbestos hazards. There are several reasons for this. First, there is no agreed-upon level of airborne asbestos concentration which can be considered safe. Second, air measurements provide only a "snap shot" of the fiber levels in a building and cannot account for peak exposures that occur when material is disturbed. Third, even if a safe level could be established, a rigorous and lengthy air monitoring program would be required in order to produce meaningful, representative data. In short, air monitoring which detects low levels of fibers cannot be viewed as definitive evidence that no hazard exists in a building with ACM.

DOCUMENT SUMMARY

Document Id: 0037x
Document Name: e-mail 10/21/87
Operator: TCA685
Author: TC

Comments:

STATISTICS

OPERATION	DATE	TIME	WORKTIME	KEYSTROKES
Created	10/21/87	07:08	:12	294
Last Revised	/ /	:	:	
Last Printed	10/21/87	07:37	:	
Last Archived	/ /	:	onto Diskette	
Total Pages:	18	Total Worktime:	:12	
Total Lines:	660	Total Keystrokes:	294	

Pages to be printed 6

Notify U13 on system ubeel.

Schedule of Courses for Asbestos
Inspectors, Management Planners,
and Abatement Contractors/Workers

October 19, 1987

Note: Schedule includes only courses offered over the next several months at facilities receiving EPA funds. These EPA-funded facilities will continue to offer training courses at a similar rate throughout 1988. Over 40 private vendors approved by EPA will be providing additional course offerings.

1987/1988
Schedule of Courses for Asbestos Information Centers
Satellite Centers
and Other EPA-Approved Courses

Asbestos Information Centers

Georgia Institute of Technology
894-3806

Contact: Mark Demyanek (404)

September 10, 1987	-----	Executive Summary of Asbestos-in-Buildings (Atlanta, Georgia)
October 5-9, 1987	-----	Asbestos Abatement Contractor/Supervisor Course
October 5-7, 1987	-----	Building Inspector Course (Washington, D.C.)
October 5-9, 1987	-----	Management Planners Course (Washington, D.C.)
October 8-9, 1987	-----	(Annual Update Course) Advanced Abatement Contractor/ Supervisor Course (Atlanta, Georgia)
October 19-23, 1987	-----	Asbestos Abatement Contractor/Supervisor Course (Atlanta, Georgia)
November 2-6, 1987	-----	Supervisory Asbestos Abatement Projects (Course workshop) (Atlanta, Georgia)
November 16-18, 1987	-----	Building Inspector Course (Atlanta, Georgia)
November 16-20, 1987	-----	Management Planner Course (Atlanta, Georgia)
November 17, 1987	-----	Executive Summary of Asbestos in Buildings (Atlanta, Georgia)
November 18, 1987	-----	Asbestos Contract Specifications Workshop (NIBS) (Atlanta, Georgia) (tentative)

November 19-20, 1987 ----- (Annual Update Course) Advanced Abatement
Contractor/Supervisor Course (Atlanta, Georgia)
December 7-11, 1987 ----- Asbestos Abatement Contractor/Supervisor
Course (Atlanta, Georgia)
December 10-11, 1987 ----- (Annual Update Course) Advanced Abatement
Contractor/Supervisor Course (Atlanta, Georgia)

University of Kansas

Contact: Lani Himegarner (913) 491-0181

October 13-16, 1987 ----- Asbestos Abatement Contractor/Supervisor Course
(Ann Arbor, MI)

October 26-28, 1987 ----- Building Inspector Course (Kansas City, Kansas)

October 26-30, 1987 ----- Management Planner Course (Kansas City, Kansas)

November 10-13, 1987 ----- Asbestos Abatement Contractor/Supervisor Course
(Kansas City, Missouri)

November 16-18, 1987 ----- Building Inspector Course (Kansas City, Kansas)

November 16-20, 1987 ----- Management Planner Course (Kansas City, Kansas)

Nov 30 - Dec 2, 1987 ----- Building Inspector Course (Kansas City, Kansas)

Nov 30 - Dec 4, 1987 ----- Management Planner Course (Kansas City, Kansas)

December 7-10, 1987 ----- Hands-on Asbestos Control Procedures
(Phoenix, Arizona)

December 8-11, 1987 ----- Asbestos Abatement Contractor/Supervisor Course
(Phoenix, Arizona)

December 9, 1987 ----- Contract Specifications and Construction Documents
(Phoenix, Arizona)

December 10-11, 1987 ----- Asbestos: Management Briefing
(Phoenix, Arizona)

December 14-16, 1987 ----- Building Inspector Course (Kansas City, Kansas)

December 14-18, 1987 ----- Management Planner Course (Kansas City, Kansas)

January 11-13, 1988 ----- Building Inspector Course (Kansas City, Kansas)

January 11-15, 1988 ----- Management Planner Course (Kansas City, Kansas)

January 19-22, 1988 ----- Asbestos Abatement Contractor/Supervisor Course
(Kansas City, Missouri)

February 8-10, 1988 ----- Building Inspector Course (Kansas City, Kansas)

February 8-12, 1988 ----- Management Planner Course (Kansas City, Kansas)

February 16-19, 1988 ----- Asbestos Abatement Contractor/Supervisor Course
(Houston, Texas)

March 7-9, 1988 ----- Building Inspector Course (Kansas City, Kansas)

March 7-11, 1988 ----- Management Planner Course (Kansas City, Kansas)

March 22-25, 1988 ----- Asbestos Abatement Contractor/Supervisor Course
(Kansas City, Missouri)

University of Illinois

Contact: Tony Bilotti (312) 996-5762

October 5-7, 1987 ----- Building Inspector Course (Chicago, Illinois)

October 5-9, 1987 ----- Management Planner Course (Chicago, Illinois)

October 26-28, 1987 ----- Building Inspector Course (Chicago, Illinois)

October 26-30, 1987 ----- Management Planner Course (Chicago, Illinois)

October 28-30, 1987 ----- Asbestos Worker Training (Chicago, Illinois)

November 3-5, 1987 ----- Asbestos Worker Training (St. Louis, MO)

November 9-13, 1987 ----- Asbestos Abatement for Contractors/Supervisors
(Chicago, Illinois)

November 16-18, 1987 ----- Building Inspector Course (Chicago, Illinois)

November 16-20, 1987 ----- Management Planner Course (Chicago, Illinois)

December 7-9, 1987 ----- Building Inspector Course (Chicago, Illinois)

December 7-11, 1987 -----	Management Planner Course (Chicago, Illinois)
December 14-18, 1987 -----	Asbestos Abatement for Contractors/Supervisors
January 4-6, 1988 -----	Building Inspector Course (Chicago, Illinois)
January 4-8, 1988 -----	Management Planner Course (Chicago, Illinois)
January 25-29, 1988 -----	Asbestos Abatement for Contractors/Supervisors (Chicago, Illinois)

February 3-5, 1987 ----- Asbestos Worker Training (Chicago, Illinois)
February 8-10, 1988 ----- Building Inspector Course (Chicago, Illinois)
February 8-12, 1988 ----- Management Planner Course (Chicago, Illinois)

Tufts University Contact: Brenda Cole (617) 381-3531 X5061

September 16, 1987 ----- (Annual Update Course) Asbestos Abatement for
Contractors/ Supervisors
October 19-23, 1987 ----- Asbestos Abatement Contractor/Supervisor Course
(Sheraton Tara Hotel, Framingham, MA)
October 29, 1987 ----- Advanced Contracts & Specifications
(Lenox Hotel, Boston MA)
November 2-6, 1987 ----- Asbestos Abatement for Contractors/Supervisors
(Sheraton Tara Hotel, Framingham, MA)
November 16-18, 1987 ----- Building Inspector Course (Boston, MA)
November 16-20, 1987 ----- Management Planner Course (Boston, MA)
Nov 30 - Dec 2, 1987 ----- Building Inspector Course
(Tufts University, Medford, MA)
December 3-4, 1987 ----- Management Planner Course
(Tufts University, Medford, MA)
January 4-8, 1988 ----- Asbestos Abatement Contractor/Supervisor
Course (Tufts University, Medford, MA)
January 11-13, 1988 ----- Building Inspector Course
(Tufts University, Medford, MA)
January 11-15, 1988 ----- Management Planner Course
(Tufts University, Medford, MA)

University of California at Berkeley Contact: Deborah Dobin (415) 643-7143

Sept 2, 1987 ----- Management Briefing on Asbestos in Buildings
(Honolulu, Hawaii)
Sept 14-18, 1987 ----- Asbestos Abatement Contractor/Supervisor Course
(Richmond, CA)
Sept 26, 1987 ----- Asbestos in the Home
(Berkeley, CA)
Sept 30, 1987 ----- Management Briefing on Asbestos in Buildings
(Honolulu, Hawaii)
Oct 6, 1987 ----- Management Briefing on Asbestos in Buildings
(San Francisco, CA)
Oct 12-16, 1987 ----- Asbestos Abatement Contractor/Supervisor Course
(Los Angeles, CA)
Oct 14, 1987 ----- Management Briefing on Asbestos in Buildings
(Los Angeles, CA)
Oct 24, 1987 ----- Asbestos in the Home (San Francisco, CA)
Nov 2-6, 1987 ----- Asbestos Abatement Contractor/Supervisor Course
(Richmond, CA)

Nov 16-18, 1987 ----- Building Inspector Course
(San Francisco, CA)

Nov 16-20, 1987 ----- Management Planner Course
(San Francisco, CA)

Dec 7-11, 1987 ----- Asbestos Abatement Contractor/Supervisor Course
 (Portland, Oregon)
 Dec 14-16, 1987 ----- Building Inspector Course
 (Los Angeles, CA)
 Dec 14-18, 1987 ----- Management Planner Course
 (Los Angeles, CA)
 Jan 11-15, 1988 ----- Asbestos Abatement Contractor/Supervisor Course
 (Richmond, CA)
 Jan 25-27, 1988 ----- Building Inspector Course (San Francisco, CA)
 Jan 25-29, 1988 ----- Management Planner Course (San Francisco, CA)
 Feb 8-12, 1988 ----- Asbestos Abatement Contractor/Supervisor Course
 (Honolulu, HI)
 Feb 25-26, 1988 ----- Operations and Maintenance for Asbestos in
 Buildings (Richmond, CA)
 March 7-11, 1988 ----- Asbestos Abatement Contractor/Supervisor Course
 (Richmond, CA)
 March 21-23, 1988 ----- Building Inspector Course (Las Vegas, NV)
 March 21-25, 1988 ----- Management Planner Course (Las Vegas, NV)

Satellite Centers

University of Texas at Arlington Contact: Dr. Ernest Crosby (817) 273-2557

September 14-18, 1987 ----- Asbestos Abatement Contractor/Supervisor Course
 (Arlington, TX)
 October 19-23, 1987 ----- Asbestos Abatement Contractor/Supervisor Course
 (Arlington, TX)
 October 19-21, 1987 ----- Building Inspector Course
 October 19-23, 1987 ----- Management Planner Course
 November 16-18, 1987 ----- Asbestos Abatement Contractor/Supervisor Course
 (Oklahoma City, OK)
 December 7-11, 1987 ----- Asbestos Abatement Contractor/Supervisor Course
 (Arlington, TX)
 January 11-15, 1988 ----- Asbestos Abatement Contractor/Supervisor Course
 (New Orleans, LA)
 February 15-19, 1988 ----- Asbestos Abatement Contractor/Supervisor Course
 (Arlington, TX)
 February 15-17, 1988 ----- Building Inspector Course
 February 15-19, 1988 ----- Management Planners Course
 March 14-18, 1988 ----- Asbestos Abatement Contractor/Supervisor Course