PLAINTIFF'S EXHIBIT
CEL-1379

South Carolina Department of Health and Environmental Control

2600 Bull Street
Columbia, S.C. 29201

Commissioner
Robert S. Jackson, M.D.

Board
Moses H. Clarkson, Jr., Chairman
Leonard W. Douglas, M.D., Vice-Chairman
Barbara P. Nuessle, Secretary
Gerald A. Kaynard
Oren L. Brady, Jr.
James A. Spruill, Jr.
William H. Hester, M.D.

Appalachia III District
Environmental Quality Control
151 E. Wood Street
Spartanburg, S.C. 29303
(803) 596-3800

May 23, 1985

MEMORANDUM

To: Robert J. Betterton
Bureau of Air Quality Control

From: Ronald R. Garrett
Appalachia III District

Re: Daniel Construction Company
Asbestos Removal from Hoechst Fibers
Spartanburg County

As you are aware, I inspected the Daniel Construction Company asbestos removal of the staple stretch area at Hoechst Fibers. The removal was out of doors and on the roof. Therefore, there were no barriers (poly) in place, no clean room, or showers. Personnel doing the removal were in street clothes under their Tyvek coveralls. It is noteworthy that removal is of HVAC ducting insulation; subsequently, fibers could be introduced into the intakes. Although the asbestos was wet before removal, I don't feel Daniel took adequate precautions to protect the workers removing the material nor any Hoechst personnel that may be exposed during the removal.

RRG/dlk
Attachment -- Asbestos Removal Evaluation
cc: William P. Brantley - Bureau of Air Quality Control

LEVEL 1 INSPECTION CHECKLIST

A. COMPLIANCE WITH 40 CFR 61 SUBPART (NESHAP)

I. REMOVAL COMPANY Asbestos Control Co.

REMOVAL SITE Hoechst Fibers DATE/TIME 5/1/85 - 10:00 A.M.

II.

	YES	NO	N/A	SEE COMMENTS
1. Was proper notification received?	✓			
2. Demolition only: was asbestos removed prior to demolition?			✓	
3. Demolition only: did demolition activities prior to asbestos removal not preclude access to the material or damage it?			✓	
4. Demolition only: were friable asbestos materials encased in concrete adequately wetted whenever exposed during demolition?			✓	
5. Was asbestos wetted before being removed or stripped?	✓			
6. Was asbestos which was removed or stripped more that 50 ft. above ground transported to the ground in sealed containers or dust-tight chutes?	✓		✓	
7. Authorized emergency demolition only: was the portion of the structure containing friable asbestos adequately wetted during wrecking. Give name of authorizing agency in comments.			✓	
8. Was the "no visible emissions to the atmosphere" requirement of the regulation being met?			✓	
9. Were asbestos contaminated waste materials wetted and placed into sealed, leakproof containers to which warning labels were attached?	✓			

HNA SB STEW 12440

LEVEL 1 INSPECTION CHECKLIST

B. COMPLIANCE WITH 29 CFR 1910 SUBPART Z SECTION 1001

REMOVAL COMPANY Aniel Const. Co.

REMOVAL SITE Hoesch Fibers DATE/TIME 5/1/85 - 10:00

1.	Were workers observed to be wearing their respirators at all times when they should have been? If not explain in comments.	(✓)( )( )( )
2.	Does the removal company have a respirator program in place?	(✓)( )( )( )
3.	Were workers provided with special clothing such as coveralls, head, foot and hand coverings and required to use them?	(✓)( )( )( )
4.	Was contaminated clothing disposed of in sealed, impermeable bags which had warning signs attached?	(✓)( )( )( )
5.	Was type C supplied air provided to workers until 8 hour time weighted average airborne fiber concentrations were determined?	( )( )( )(✓)
6.	Was respiratory protection, at least air purifying respirators, utilized throughout the removal?	(✓)( )( )( )
7.	Was personal monitoring conducted to determine the 8 hour average and ceiling concentrations of fibers?	( )(✓)( )( )
8.	Was area monitoring conducted to determine the average and ceiling fiber concentrations?	(✓)( )( )( )
9.	Were warning signs posted at all entrances to the removal area and at any place were exposure could be expected?	(✓)( )( )( )

HNA SB STEW 12441

III. COMMENTS

FULLY DESCRIBE ANY VIOLATIONS NOTED:

HNA SB STEW 12443

13.	Was a type C supplied air system provided for the workers? (If not indicate type in comments)	( )	(✓)	( )	( )
14.	Was a type C supplied air system equipped with full face respirators provided for the workers? (If not, indicate type in comments.	( )	(✓)	( )	( )
15.	Did the workers appear to be wearing their respirators correctly and did facial hair appear to <u>not</u> be a source of leakage?	(✓)	( )	( )	( )
16.	Was the intake of the supplied air pump located away from any source of contamination?	( )	( )	(✓)	( )
17.	If the pump was fuel powered did the supplied air have to pass through a manifold equipped with a CO monitor, oil/water separator and a particle filter?	( )	( )	(✓)	( )
18.	If the air came from an oilless electric pump was it equipped with any kind of filters and CO monitors?	( )	( )	(✓)	( )
19.	Was it equipped with a HEPA filter?	( )	( )	(✓)	( )
20.	Were respirators required during preparation of the work area?	( )	( )	(✓)	( )
21.	~~Here~~ will respirators required during clean-up?	(✓)	( )	( )	( )
22.	If any respirators not in use were available for examination, did they appear to be spotlessly clean?	( )	( )	(✓)	( )
23.	Were the respirators stored up, off the ground and away from sources of contamination?	(✓)	( )	( )	( )
24.	Was water applied to the asbestos with low pressure sprayers? (Based on interview, not necessarily observed)	(✓)	( )	( )	( )
25.	Was excessive water use minimized? ie., no water was observed leaking out of the work area?	(✓)	( )	( )	( )
26.	Was ammended water used?	(✓)	( )	( )	( )

LEVEL 2 INSPECTION

B. GENERAL INFORMATION: BASED ON INTERVIEW WITH JOB-SITE SUPERVISOR

1. What type of respirators were worn during preparation of the work area?
   none

2. What type of respirators were used during the removal?
   Willson AR 700 - with R-12 Filter

3. What type respirators were worn during clean-up?
   none

4. What procedures were followed to minimize emmissions during stripping§?
   see comments

5. What procedures were followed to minimize emissions during clean-up and breakdown? see comments

6. What was "clean air" value to which contractor must continue cleaning operations before clearance is achieved? .02

7. How large did the clean air sample have to be (liters)? 960

8. Type and percent (%) asbestos present? no bulk samples

9. How many workers were there? 4

10. How many supervisors were there? 1

11. How many of the supervisors have attended "supervision of asbestos abatement contracts" or related courses?
    not this specific course
    (1) "Asbestos - A Program For Protection"
    (2) "Doin' it Right!"

HNA SB STEW 12447

South Carolina Department of Health and Environm ntal Control

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Re: Daniel Construction Company
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RRG/dlk

Attachment -- Asbestos Removal Evaluation

cc: William P. Brantley - Bureau of Air Quality Control

HNA SB STEW 12571

ASBESTOS REMOVAL EVALUATION

1. Name of Removal Company — Aanic / Const Co.
2. Address of Removal Company —
3. Name of Removal Site — Hoescht Fibers
4. Location of Removal Site — Roof of Staple A Stretch
5. What (Bldg, structure, room etc) is being stripped? — removing insulation from HVAC
6. Name of Job Site Supervisor — Richard White
7. Date/Time of Inspection — 10:00 a.m. 5/1/85
8. Was there a written contract for the project? — none specific for asbestos removal
9. If so, who developed the contract? —
10. Was there a representative for the building owner onsite? Who? — Charles Powell, Roxane Cohen
11. Who collected the air samples? — Hoescht (see comments)
12. Who will go to the landfill within 24 hours of disposal: the air manager or the solid waste consultant? — Ron Gerrett
13. Level of inspection performed. —
14. Work in progres: preparation, removal or cleanup/breakdown? — removal
15. Number of points subtracted in NESHAP Section? —
16. Number of points subtracted in OSHA Section? —
17. Number of points subtracted in Level 2 section (Be sure to count off 6 points for Questions 1,2, 5,22,30,32. Count off 9 points for Q 13). —
18. Total score (subtract the sum of 15-17 above from 100). — Not scored since project was outdoor

HNA SB STEW 12572

LEVEL 1 INSPECTION CHECKLIST

A. COMPLIANCE WITH 40 CFR 61 SUBPART (NESHAP)

I. REMOVAL COMPANY Asbestos Control Co.

REMOVAL SITE Manville Fibers DATE/TIME 5/1/85 - 10:00 A.M.

II.

		YES	NO	N/A	SEE COMMENTS
1.	Was proper notification received?	✓			
2.	Demolition only: was asbestos removed prior to demolition?			✓	
3.	Demolition only: did demolition activities prior to asbestos removal not preclude access to the material or damage it?			✓	
4.	Demolition only: were friable asbestos materials encased in concrete adequately wetted whenever exposed during demolition?			✓	
5.	Was asbestos wetted before being removed or stripped?	✓			
6.	Was asbestos which was removed or stripped more that 50 ft. above ground transported to the ground in sealed containers or dust-tight chutes?	✓		✓	
7.	Authorized emergency demolition only: was the portion of the structure containing friable asbestos adequately wetted during wrecking. Give name of authorizing agency in comments.			✓	
8.	Was the "no visible emissions to the atmosphere" requirement of the regulation being met?			✓	
9.	Were asbestos contaminated waste materials wetted and placed into sealed, leakproof containers to which warning labels were attached?	✓			

HNA SB STEW 12573

10. Was asbestos waste taken to an approved landfill and was the material buried within 24 hours by atleast 6 inches of non-asbestos materials? ( )( )( )( )

III. COMMENTS

_____

_____

_____

_____

(attach additional sheets if necessary)

IV. FULLY DESCRIBE ANY VIOLATIONS NOTED

_____

_____

_____

_____

(attach additional sheets if necessary)

HNA SB STEW 12574

LEVEL 1 INSPECTION CHECKLIST

B. COMPLIANCE WITH 29 CFR 1910 SUBPART Z SECTION 1001

REMOVAL COMPANY Asbestos Const. Co.

REMOVAL SITE Asbestos Fibers DATE/TIME 5/1/85 - 10:00

1.	Were workers observed to be wearing their respirators at all times when they should have been? If not explain in comments.	(✓)	( )	( )	( )
2.	Does the removal company have a respirator program in place?	(✓)	( )	( )	( )
3.	Were workers provided with special clothing such as coveralls, head, foot and hand coverings and required to use them?	(✓)	( )	( )	( )
4.	Was contaminated clothing disposed of in sealed, impermeable bags which had warning signs attached?	(✓)	( )	( )	( )
5.	Was type C supplied air provided to workers until 8 hour time weighted average airborne fiber concentrations were determined?	( )	( )	( )	(✓)
6.	Was respiratory protection, at least air purifying respirators, utilized throughout the removal?	(✓)	( )	( )	( )
7.	Was personal monitoring conducted to determine the 8 hour average and ceiling concentrations of fibers?	( )	(✓)	( )	( )
8.	Was area monitoring conducted to determine the average and ceiling fiber concentrations?	(✓)	( )	( )	( )
9.	Were warning signs posted at all entrances to the removal area and at any place were exposure could be expected?	(✓)	( )	( )	( )

HNA SB STEW 12575

10.	Were caution labels affixed to all materials containing asbestos fibers or to their containers?	(✓)	( )	( )	( )
11.	Were external surfaces of the removal area kept free of accumulations of asbestos?	(✓)	( )	( )	( )
12.	Will the employer keep the air monitoring records for 20 years?	(✓)	( )	( )	( )
13.	Will the employees be given access to the air monitoring data?	(✓)	( )	( )	( )
14.	Will the employees be notified if it is determined that they had exposures in excess of the standard?	(✓)	( )	( )	( )
15.	Were employees provided with medical exams within 30 days of employement? The exams were to include Chest, X-Ray, Pulmonary Function Text (FVC and FEV) and a history to elicit symptomatology of respiratory disease.	(✓)	( )	( )	( )
16.	Are annual medical exams given to permanent employees?	(✓)	( )	( )	( )
17.	Will the employer keep the medical records for 20 years and will they be available for authorized inspection?	(✓)	( )	( )	( )

HNA SB STEW 12576

III. COMMENTS

FULLY DESCRIBE ANY VIOLATIONS NOTED:

HNA SB STEW 12577

LEVEL 2 INSPECTION CHECKLIST

A. OBSERVATIONS FROM OUTSIDE THE WORK AREA

		YES	NO	N/A	SEE COMMENTS
1.	Was the work area sealed off using polyethlene sheets?				✓
2.	Was a decontamination unit constructed?		✓		
3.	Did the decontamination unit consist of clean, shower and equipment rooms?		✓		
4.	Did the clean room appear to be clean?			✓	
5.	Did the clean room, the ground outside or other areas, eg., the dumpster, appear to be free of plaster-like debris?	✓			
6.	Did the polyethylene barriers appear to be in good shape: not ripped or hanging down excessively?				✓
7.	Was a routine maintenance program in effect to keep poly in place?				✓
8.	Was there a separate airlock for removing bags of contaminated waste?		✓		
9.	Did the bags of waste appear to be clean on the outside?	✓			
10.	Did the material inside the bags appear to be damp? If dry enter a violation for question 9 of the NESHAP section (Level 1).	✓			
11.	Were workers who carried the bags of waste to the truck required to wear respirators?	✓			
12.	Were workers who unloaded the truck at the landfill required to wear respirators?				

HNA SB STEW 12578

13.	Was a type C supplied air system provided for the workers? (If not indicate type in comments)	( )	(✓)	( )	( )
14.	Was a type C supplied air system equipped with full face respirators provided for the workers? (If not, indicate type in comments.	( )	(✓)	( )	( )
15.	Did the workers appear to be wearing their respirators correctly and did facial hair appear to not be a source of leakage?	(✓)	( )	( )	( )
16.	Was the intake of the supplied air pump located away from any source of contamination?	( )	( )	(✓)	( )
17.	If the pump was fuel powered did the supplied air have to pass through a manifold equipped with a CO monitor, oil/water separator and a particle filter?	( )	( )	(✓)	( )
18.	If the air came from an oilless electric pump was it equipped with any kind of filters and CO monitors?	( )	( )	(✓)	( )
19.	Was it equipped with a HEPA filter?	( )	( )	(✓)	( )
20.	Were respirators required during preparation of the work area?	( )	( )	(✓)	( )
21.	~~Here~~ Were respirators required during clean-up?	(✓)	( )	( )	( )
22.	If any respirators not in use were available for examination, did they appear to be spotlessly clean?	( )	( )	(✓)	( )
23.	Were the respirators stored up, off the ground and away from sources of contamination?	(✓)	( )	( )	( )
24.	Was water applied to the asbestos with low pressure sprayers? (Based on interview, not necessarily observed)	(✓)	( )	( )	( )
25.	Was excessive water use minimized? ie., no water was observed leaking out of the work area?	(✓)	( )	( )	( )
26.	Was ammended water used?	(✓)	( )	( )	( )

27.	Did the water from the shower unit drain into drums or into City sewers?	( )	( )	( )	✓ ( )	
28.	Was the water filtered before disposal?	( )	( )	( )	✓ ( )	
29.	Was contaminated water <u>not</u> allowed to drain onto the ground?	( )	( )	( )	✓ ( )	
30.	Was a negative air machine used?	( )	( )	( )	✓ ( )	
31.	Did it exhaust to the outside air?	( )	( )	( )	✓ ( )	
32.	Did all equipment such as ladders, scaffolding, airhoses, etc., stored outside the work area appear to be clean and free of gross asbestos contamination?	( )	( )	( )	✓ ( )	
33.	Was all equipment spotlessly clean?	(✓)	( )	( )	( )	
34.	Were most of the workers experienced?	(✓)	( )	( )	( )	
35.	Was a dust supression agent used to damp wipe for the final cleanup? (detergent/surfactant is not usually considered a satisfactory dust supression agent).	( )	( )	( )	( )	✓ ( )
36.	Were workers provided with an isolated place to store their street clothes that would prevent asbestos contamination?	( )	✓ ( )	( )	( )	

COMMENTS:

HNA SB STEW 12580

LEVEL 2 INSPECTION

B. GENERAL INFORMATION: BASED ON INTERVIEW WITH JOB-SITE SUPERVISOR

1. What type of respirators were worn during preparation of the work area?
NONE

2. What type of respirators were used during the removal?
Willson AR 700 - with R-12 Filter

3. What type respirators were worn during clean-up?
none

4. What procedures were followed to minimize emmissions during stripping§?
see comments

5. What procedures were followed to minimize emissions during clean-up and breakdown? see comments

6. What was "clean air" value to which contractor must continue cleaning operations before clearance is achieved? .02

7. How large did the clean air sample have to be (liters)? 960

8. Type and percent (%) asbestos present? no bulk samples

9. How many workers were there? 4

10. How many supervisors were there? 1

11. How many of the supervisors have attended "supervision of asbestos abatement contracts" or related courses?
not this specific course.
(1) "Asbestos - A Program For Protection"
(2) "Doin' it Right"

HNA SB STEW 12581