PLAINTIFF'S EXHIBIT

UC-3027

APR 14 1983

INTERNAL CORRESPONDENCE

UNION CARBIDE CORPORATION PO BOX 579, 4625 ROYAL AVE.
METALS DIVISION NIAGARA FALLS, NEW YORK 14302

To (Name) Messrs. R. J. Kronkhyte
Division J. L. Myers
Location UCC - Metals Division
Area King City, CA

Date April 11, 1983

Originating Dept. New Product Development

Area

Copy to Messrs. G. L. Dickson
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Subject Asbestos Dust Control Results of NIOSH Air Monitoring Survey of King City Bagging Room Operations

Project No. 530-10903

During the week of January 23-30, 1983, NIOSH ran a three-day air monitoring survey of the plant bagging operations. Objectives of the survey, test protocols and operating conditions are discussed in the attached report issued by the writer February 3, 1983.

The fiber count results for March 25, 26 and 27 are shown in Tables I, II and III, respectively. Ceiling value concentrations in the main circuit bagging area ranged from 0.4 to 6.8 fibers/cc for personal samples. Personal ceiling exposures for the RG-244 bagging operator were between 1.1 and 6.6 fibers/cc. Personal time weighted averages (TWA) based on approximately four hours of testing per day demonstrated levels in excess of 2.0 fibers/cc in four separate instances. TWA's for operators in the main circuit bagging room ranged from 0.5 to 3.6 fibers/cc. TWA's for the RG-244 bagger were 1.4 to 3.8 fibers/cc.

The high exposures are attributed for the most part to various mechanical problems evident during the course of these tests; the details of which are covered in the preliminary report appended. However, these tests demonstrate the need for some sort of continuous monitoring program. It would, in my opinion, behoove us to proceed with a plant evaluation of continuous air monitoring equipment as soon as possible.

Tom Cooper, project leader of the NIOSH survey team, contacted me March 30th. They have completed the dust counts and their results are considerably lower than ours. According to Tom, their highest ceiling value was 2.7 fibers/cc and the TWA's were all less than 0.6 fibers/cc. I did not discuss our findings with him. He is sending us copies of their raw data this week. The final report will not be forthcoming for at least another month or two.

In view of the discrepancies between labs, we recounted several of the more heavily loaded filters. These results are shown in Table IV. Generally speaking, the replicate counts demonstrated correlations with original test results within the accepted limits of variance. With one exception, Sample D-60, the replicate counts were significantly lower than the original count. This sample contained a considerable amount of fine fiber with diameters approaching the visible detection limit at 400X magnification and was very difficult to count. This type of fiber was detected in some of the other RG-244 samples as well. With fine particulate of this nature, every field viewing area has to be scrutinized in detail at several focal planes. Normally, a sample can be counted in 10 to 20 minutes. By comparison, it took approximately an hour to count D-60.

As you are aware, our fiber does not exhibit the morphology typical of Canadian chrysotile. Coalinga asbestos has a much smaller mean diameter and fiber length distribution. Because of this and the fact that most counting laboratories are not familiar with Coalinga asbestos, their fiber counts are often artifically low. I should point out that it is possible that the NIOSH counts are correct. Prior studies have shown that the variance between simultaneous multiple samples can be quite high. In this instance, however, I think the problem is related to differences in the counting procedure rather than between samples. It would appear that the NIOSH counting lab missed a significant amount of asbestos fiber in some of the samples.

B. L. Ingalls

BLI:et
Attach.

TABLE I

KING CITY AIR MONITORING TEST RESULTS - MARCH 25, 1983

Main Circuit Bagging Area					RG-244 Circuit Bagging Area				
Sample No.	Sample Identification	Time On	Time Off	Fibers/cc of air	Sample No.	Sample Identification	Time On	Time Off	Fibers/cc of air
D-54	Personal - L. Trevino-bagger	8:05	10:01	0.7	D-60	Personal - J. Godinho-bagger	10:34	12:01	6.6(2)
D-44	Personal - L. Trevino-bagger	13:47	15:34	6.8(1)	D-52	Personal - J. Godinho-bagger	13:50	15:32	1.5
			(TWA = 3.6)					(TWA = 3.8)	
D-45	Personal - M. Segobia-palletizer	8:13	10:01	0.4	D-69	Area - near broken bag disposal unit	10:31	11.56	0.1
D-64	Personal - M. Segobia-palletizer	13:45	15:34	0.6	J-54	Area - near broken bag disposal unit	13:51	15:31	0.2
			(TWA = 0.5)					(TWA = 0.2)	
D-56	Area - at end of bag shaper	8:04	10:07	0.1	D-59	Area - over bagging unit	10:33	11:58	0.3
D-51	Area - at end of bag shaper	13:46	15:38	0.3	J-34	Area - over bagging unit	13:54	15:31	0.2
			(TWA = 0.2)					(TWA = 0.2)	
D-63	Area - over bagging unit	8:11	10:05	0.2					
D-65	Area - over bagging unit	13:42	15:39	0.3					
			(TWA = 0.3)						

(1) Bagger entered product bin for ~ 20 minutes during this sample period.

(2) RG-244 bagging unit not working properly. Some bag breakage occured during this period.

TABLE II

KING CITY AIR MONITORING TEST RESULTS - MARCH 26, 1983

Main Circuit Bagging Area				
Sample No.	Sample Identification	Time On	Time Off	Fibers/cc of air
J-36	Personal - L. Trevino-bagger	8:05	10:00	2.8
K-41	Personal - L. Trevino-bagger	12:56	15:07	1.4
			(TWA = 2.1)	
D-57	Personal - M. Segobia-palletizer	8:01	10:00	1.3
D-74	Personal - M. Segobia-palletizer	12:58	15:09	1.1
			(TWA = 1.2)	
D-68	Area - Over main bagging unit	7:41	9:58	0.6
L-74	Area - Over main bagging unit	12:42	15:10	0.4
			(TWA = 0.5)	
J-53	Area - Over Auger packer	7:46	9:58	0.9
K-35	Area - Over Auger packer	12:43	15:10	1.3
			(TWA = 1.1)	
D-50	Area - Over bag shaper	7:43	9:56	0.4
K-36	Area - Over bag shaper	12:44	15:08	0.2
			(TWA = 0.3)	

RG-244 Circuit Bagging Area				
Sample No.	Sample Identification	Time On	Time Off	Fibers/cc of air
H-14	Personal - J. Godinho-bagger	8:05	9:56	1.8
J-32	Personal - J. Godinho-bagger	12:52	15:01	1.1
			(TWA = 1.4)	
K-31	Area - Near broken bag disposal unit	8:00	9:56	0.2
C-23	Area - Near broken bag disposal unit	12:49	15:02	0.3
			(TWA = 0.3)	
J-50	Area - Over bagging unit	8:01	9:56	0.1
J-20	Area - Over bagging unit	12:50	15:03	0.1
			(TWA = 0.1)	

TABLE III

KING CITY AIR MONITORING TEST RESULTS - MARCH 27, 1983

Main Circuit Bagging Area				
Sample No.	Sample Identification	Time On	Time Off	Fibers/cc of air
E-65	Personal - L. Trevino-bagger	8:01	9:59	1.6
A-16	Personal - L. Trevino-bagger	13:15	15:19	1.1
			(TWA = 1.3)	
C-30	Personal - M. Segobia-palletizer	8:02	10:01	0.5
K-45	Personal - M. Segobia-palletizer	13:18	15:20	0.9
			(TWA = 0.7)	
C-10	Area - Over main bagging unit	8:03	10:10	<0.1
J-67	Area - Over main bagging unit	13:16	15:21	0.9
			(TWA = 0.5)	
C-32	Area - Over Auger packer	8:03	10:08	0.1
J-66	Area - Over Auger packer	13:16	15:21	1.2
			(TWA = 0.7)	
K-30	Area - Over bag shaper	8:05	10:06	<0.1
D-76	Area - Over bag shaper	13:18	15:22	0.5
			(TWA = 0.3)	

RG-244 Circuit Bagging Area				
Sample No.	Sample Identification	Time On	Time Off	Fibers/cc of air
D-40	Personal - J. Godinho-bagger	8:11 9:31	8:14 10:01	5.1(1)
J-72	Personal - J. Godinho-bagger	13:28	15:14	1.4
			(TWA = 2.3)	
B-96	Area - Near broken bag disposal unit	8:02	9:56	0.7
C-26	Area - Near broken bag disposal unit	13:16	15:13	0.4
			(TWA = 0.5)	
B-53	Area - Over bagging unit	8:03	8:14	5.5(1)
L-85	Area - Over bagging unit	13:16	15:14	0.1
			(TWA = 0.5)	

(1) RG-244 bagging unit had a leak and repairs took most of the morning.

TABLE IV

UCC REPLICATE FIBER COUNTS

Sample No.	Original Count[1]	Replicate Count[2]	Replicate Count[3]
J-36	3.1	1.3	2.7
D-40	5.1	4.0	6.2
D-44	6.8	6.7	8.1
D-60	6.6	3.4	4.6
D-64	0.6	0.6	0.6

[1]Performed by F. L. Smith - March 11, 1983

[2]Performed by F. L. Smith - March 29, 1983

[3]Performed by B. L. Ingalls - March 30, 1983

Niagara Falls, New York, February 3, 1983

REPORT NO. 83-M-4

FILE NO. 530-10903

UNION CARBIDE CORPORATION

METALS DIVISION

TECHNOLOGY DEPARTMENT - PRODUCT DEVELOPMENT

TRIP TO: King City, California

DATE: January 23-30, 1983

BY: B. L. Ingalls

PURPOSE: NIOSH Monitoring Survey

INTRODUCTION

NIOSH ran a three day air monitoring survey of the plant bagging operations. The objective of this study is to document effective methods currently in practice for the control of airborne dust and further promote their use in industry.

DISCUSSION

NIOSH personnel in attendence:

Thomas C. Cooper, Mining Engineer (Project Leader) NIOSH, 4676 Columbia Parkway, Cincinatti, OH 45226, Telephone: 513-684-4320

Paul E. Caplan, P.E., C.I.H. Res. INd. Hygienist (address, same as above) Telephone: 513-684-4442

Alfred A. Amendola, P.E. Chief, Materials Porcessing, (address, same as above) 513-684-4224

Pierre L. Belanger, M.S., Industrial Hygienist, NIOSH, DHEW, region 1X 50 United Nations Plaza , San Francisco, CA 94102, telephone: 415-556-3781

Test Protocol

Air samples were obtained on bagging personnel in both the RG-244 and Main circuit bagging areas for approximately two consecutive hours in the morning and again in the afternoon of January 25, 26 and 27, 1983. A total of eighteen stationary area locations were also monitored at the same times in the two bagging rooms. NIOSH collected a total of 120 area and 18 personnel samples over the course of the three days. Samples were collected by Union Carbide simultaneously on the three bagging operators and at five of the stationary area points monitored by NIOSH totaling 47 samples in all. Area sampling locations are shown in attached schematics of the RG-244 and Main circuit bagging rooms.

Test Protocol cont'd

NIOSH also conducted tests for hood face-velocities, duct and static pressure measurements and pitot tube traverses of the ventilation systems in the two bagging areas.

NIOSH used MSA model G pumps calibarated to a setting of 1.5 L/m. UCC used MSA model G and new Gilian model HF 113T pumps also set at 1.5 L/m. Millipore membrane filters of 0.8 micron porosity were used throughout.

Sample identifications and test information regarding sampling times, locations, and other pertinent data are appended. Photographs were taken by NIOSH of the various test locations and negatives were left with UCC for editing prior to release.

Operating Conditions

January 25, 1983- Weather conditions: temperature low 60's with scattered clouds and light to moderate winds (5-15 mph).

The RG-244 bagging unit was not performing properly during the grave shift resulting in excessive bag breakage. The problem was resolved before testing commenced but some breakage did occur during the day. Pellet cooler broke down requiring approximately 1 1/2 days to repair.

Bauer mill seals failed sometime during later part of the grave shift. Both Main circuit and RG-244 products were contaminated with oil necessitating a temporary shut-down and purging of the circuits. The Bauer was bypassed for the remainder of the week while repairs were made. As a result, only RG-244 and SG-103.5 were produced during the monitoring tests. The Black and Stoker packers were used for the main circuit material during the morning of the 25th. Switched to the Auger packer and plastic bags in the afternoon which continued for the remainder of the week. The main circuit bagger went into the product bin during the last 20 minutes of the morning test (sample P-1, 8:05 - 10:01am.

January 26, 1983 - Weather cloudy with a slight drizzle in the afternoon. Temperatures ranged from high 50's to mid 60's. Winds medium to high with gusts 10-30 mph. Some dusting noticed late morning in RG-244 bagging area. A Raymond mill was being repaired and considered a possible source of the problem.

RG-244 bagger went inside the bagging unit temperarily (2-5 minutes) during the morning test. (Sample P-3, 8:05-9:56 am). RG-244 rotolouvre drier was not operating properly. Firing unit repeatedly kicking out causing erratic moisture control. Ultimately, it was repaired during the course of the day.

The main circuit ventilation duct for the broken bag disposal unit was found to be plugged several feet during pitot tests. A considerable dust cloud was generated in the area for approximately 2-3 minutes while the duct was being cleaned at 3:05 - 3:08 pm.

January 27, 1983 - Rain light to heavy during the morning with winds up to 25-35 mph. Temperature 50-55° Cloudy with higher temperatures and intervals of sunshine during the afternoon.

RG-244 bagger unit leaking asbestos fines. Considerable dusting in bag room during grave shift; fines on the rafters and floor etc. Windy conditions caused dust swirling effects in the bag room. Testing was terminated for

approximately 1 1/2 hours while repairs were made to the bagging unit. NIOSH subsequently decided to discard morning samples obtained in the RG-244 area because of abnormal conditions stated.

Preliminary Observations

Dust and hood velocities measured by NIOSH were found in general to be within design specification limits established by UCC Engineering.

NIOSH Comments:

In general, plant dust controls and work practices were good, but could be improved in some areas. No serious problems were noted. Suggestions included:

1. A ventilation hood over the RG-244 broken bag disposal unit.
2. Modification of the air duct pickup system for the main circuit broken bag disposal system to prevent clogging.
3. The addition of plastic closure strips at the openings of the bag shapers and shrink wrap ovens where not already in use.
4. Bar to be installed across RG-244 bagger hood opening to prevent operators from entering the unit during cleaning.
5. Removal of an elbow in the air duct hose to the RG-244 bagger cone to improve flow.
6. Eliminate spillage from RG-244 bag spouts between packer and weighing scale (work practice problem).
7. An enclosure or hood for the RG-244 Micro-Pulverizer equipment (UCC suggestion).
8. Main circuit bagger enclosure exhaust duct slide gate requires some sort of locking mechanism to prevent accidental closing.
9. Exhaust dust catcher under main circuit straightening belt just before shrink wrapping device not working properly.

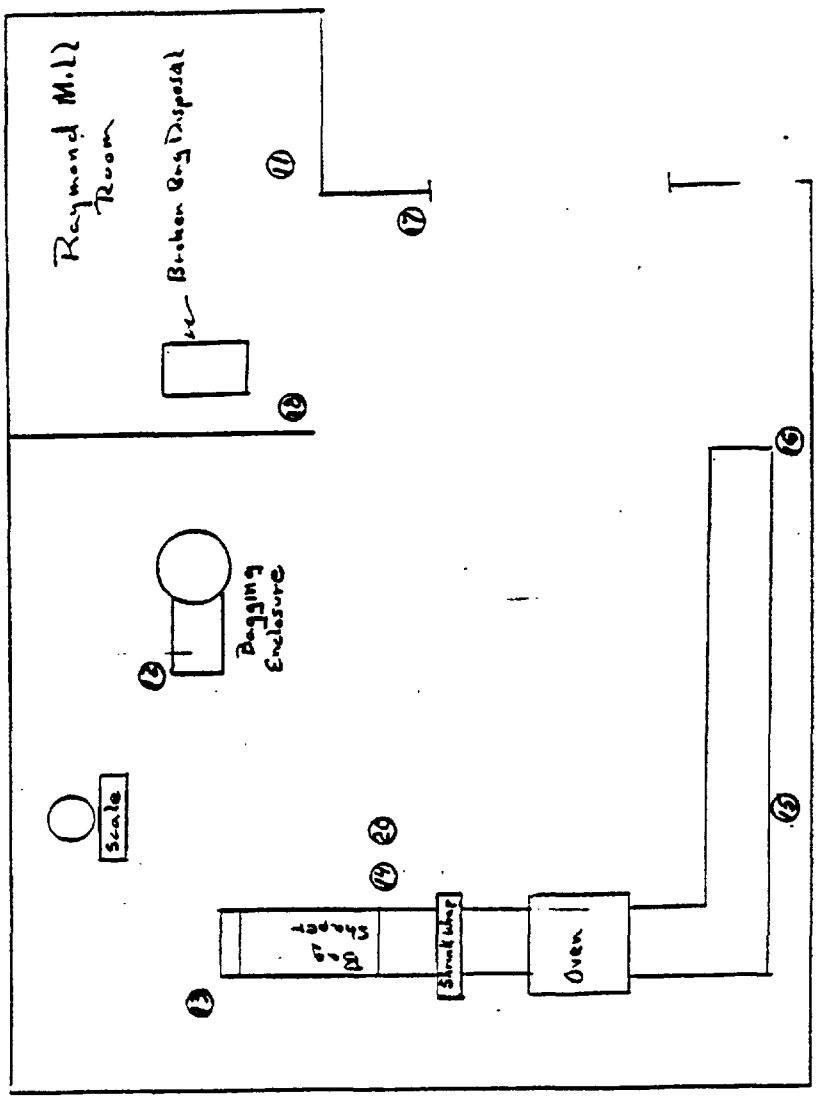
CONCLUSIONS

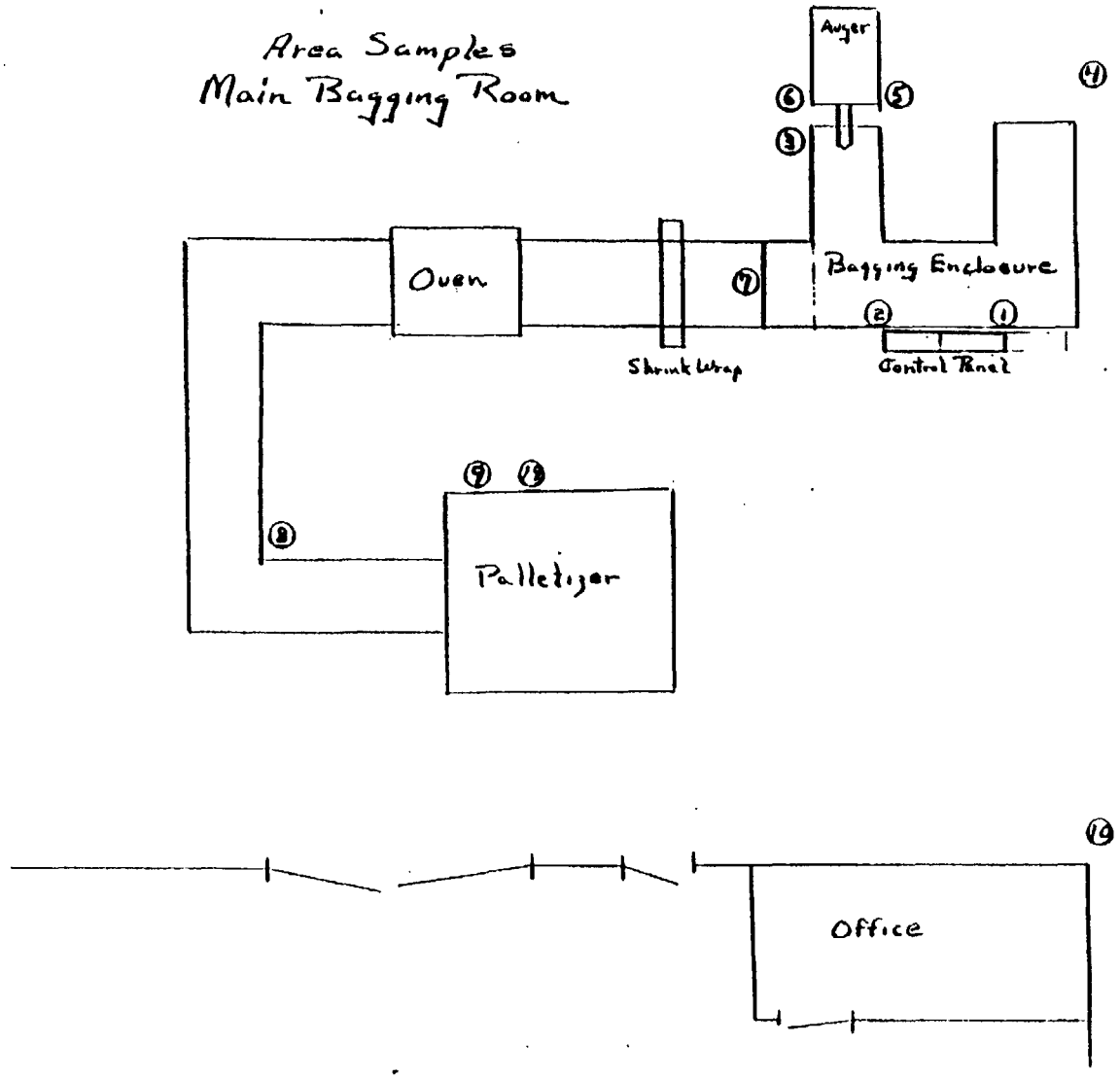
Conclusions are pending completion of the fiber counts and compilation of the test results. At such time, the results of the two laboratories will be exchanged for comparative purposes.

B. L. Ingalls

/jl

Area Samples
RG-244 Bagging Room




Area Samples
Main Bagging Room
Auger
6
5
4
3
Oven
7
Bagging Enclosure
2
1
Shrink Wrap
Control Panel
9
10
8
Palletizer
12
Office

ASBESTOS INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: King City I.D. #: C40106 2
Worker Sampled: Leo Travanio
Soc.Sec. #: 572 48 2656
Job Description: 038 Bagger (Main Circuit)
Sample Type: Personal ✓ Area ___
Sampled By: CJC Date: 1/25/83
Counted By: JB Date: 3/11/83
Graticule Field Area: .0028 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA: ___
Ceiling: ___

BASIS:
MSHA ___ OSHA ___ STATE ___ UCC ___
OTHER NIOSH

Scheduled Hours Per Shift: ___

WORKPLACE CONDITIONS:

Operations: Normal ___ Not Normal ✓
Explain: Bonus [illegible] ...
Ventilation: Type: Exhaust systems
Normal ✓ Not Normal ___
Explain: ___

WEATHER CONDITIONS:

Precipitation ___ Cloudy ___ Partly Cloudy ✓ Clear ___
Wind: Calm ___ Light ✓ Medium ✓ High ___ Temperature 60 °F

Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D. #	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks (NIOSH)
D-54 P-1		Gilian T-3129	8:05	10:01	1.5	555	100	116	.718		#677 Bagging SG-100
D-44 P-1		Gilian T-3429	13:47	15:34	1.5	121.5	25	107	6.813		#1006 Bagging SG-100
							TWA		3.643		Then entered bagging product bin
											for a last 20 minutes of sampling period

UCC 001394

ASBESTOS | INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: King City I.D.#: 0401062
Worker Sampled: Manuel Segobia
Soc.Sec.#: 549-44-9570
Job Description: 028 Pelletizer (Main Circuit)
Sample Type: Personal ✓ Area __
Sampled By: OC Date: 1/25/83
Counted By: JE Date: 3/11/83

Graticle Field Area: .0038 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA: ______
Ceiling: ______
BASIS:
MSHA __ OSHA __ STATE __ UCC __
OTHER NIOSH

Scheduled Hours Per Shift: ______

WORKPLACE CONDITIONS:

Operations: Normal __ Not Normal ✓
Explain: Furnace Cracking oil *
Ventilation: Type: Exhaust System
Normal ✓ Not Normal __
Explain: ______

WEATHER CONDITIONS:

Precipitation __ Cloudy __ Partly Cloudy ✓ Clear __
Wind: Calm __ Light ✓ Medium ✓ High __ Temperature 60°F

Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D.#	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks
											NIOSH
D-45 / P-2		Gilian / 73122	8:13	10:01	1.5	28.5	100	108	.396		#915 Pelletizing SG-100
D-64 / P-2		Gilian / 73123	13:45	15:34	1.5	47	100	109	.647		#1022 same
							TWA		.522		
											* Furnace shut down annual run for repairs
											Pellet cooler also broke down during the day requiring ~ 1½ days to repair

ASBESTOS | INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: King City I.D. #: 0401062
Worker Sampled: John [illegible]
Soc.Sec.#: 558-47-7831
Job Description: RC 244 Bagger
Sample Type: Personal ✓ Area __
Sampled By: [illegible] Date: 1/25/83
Counted By: TS Date: 3/1/83

Graticle Field Area: .0038 mm² Type: UB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA: ______
Ceiling: ______

BASIS:
MSHA __ OSHA __ STATE __ UCC __
OTHER NIOSH

Scheduled Hours Per Shift: ______

WORKPLACE CONDITIONS:

Operations: Normal __ Not Normal ✓
Explain: Banner leaking oil
Ventilation: Type: Exhaust system
Normal ✓ Not Normal __
Explain ______

WEATHER CONDITIONS:

Precipitation __ Cloudy __ Partly Cloudy ✓ Clear __
Wind: Calm __ Light ✓ Medium ✓ High __ Temperature 60 °F

SAMPLING INFORMATION | INPUT DATA | RESULTS

Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D. #	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks
											NIOSH
D 60 / P 3		Gilian / T 3374	10:24	12:01	1.5	114.5	30	87	6.581		#881 Bagging (included 30 min lunch period)
D 52 / P 3		Gilian / T 3374	13:50	15:32	1.5	99	100	102	1.456		#1014 RC 244 bagger was not working properly - some bag breakage mostly during 1st half of shift
							TWA		3.815		

ASBESTOS | INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: K. City I.D.#: 040462

Worker Sampled:

Soc.Sec.#:

Job Description:

Sample Type: Personal __ Area ✓

Sampled By: [illegible] Date: 1/25/83

Counted By: [illegible] Date: 3/11/83

Graticle Field Area: .0038 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA:

Ceiling:

BASIS:

MSHA __ OSHA __ STATE __ UCC __

OTHER NIOSH

Scheduled Hours Per Shift:

WORKPLACE CONDITIONS:

Operations: Normal __ Not Normal ✓

Explain: Burner Bushing coil

Ventilation: Type: Exhaust Systems

Normal ✓ Not Normal __

Explain:

WEATHER CONDITIONS:

Precipitation __ Cloudy __ Partly Cloudy ✓ Clear __

Wind: Calm __ Light ✓ Medium ✓ High __ ~Temperature 60°F

Sample I.D. / Job Location	Respirator Type % Use	Pump Type I.D.#	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks
											NIOSH
D-56 A-7		Gilian T-3325	8:04	10:07	1.5	8	100	123	.098		#920 Located over opening at end of bag skipper (~15 inches)
D-57 A-7			13:46	15:38	1.5	21.5	100	112	.288		#1020 Same
							TWA		.189		

Form: UCC/MTI S-OH-82-4/2A

UCC 001397

ASBESTOS INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: King City I.D.#: 0901062
Worker Sampled:
Soc.Sec.#:
Job Description:
Sample Type: Personal ___ Area ✓
Sampled By: CE Date: 1/25/83
Counted By: JS Date: 3/11/83
Graticle Field Area: .0038 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA:
Ceiling:

BASIS:
MSHA ___ OSHA ___ STATE ___ UCC ___
OTHER NIOSH

Scheduled Hours Per Shift:

WORKPLACE CONDITIONS:

Operations: Normal ___ Not Normal ✓
Explain: Bag dumping unit
Ventilation: Type: Exhaust system
Normal ✓ Not Normal ___
Explain:

WEATHER CONDITIONS:

Precipitation ___ Cloudy ___ Partly Cloudy ✓ Clear ___
Wind: Calm ___ Light ✓ Medium ___ High ___ Temperature 60 °F

Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D.#	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks
											NIOSH
C-63 A-162		Gilian T 2276	8:11	10:05	1.5	12.5	100	114	.164		#918 & 889 Located over man bagging unit (~18 inches)
C-65 A-162		Gilian T 3376	13:42	15:39	1.5	20	100	117	.256		#1000 & #1025 Same
								TWA	.211		

ASBESTOS INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: K. City I.D. #: 040602
Worker Sampled: ______
Soc.Sec. #: ______
Job Description: ______
Sample Type: Personal __ Area ✓
Sampled By: [illegible] Date: 1/25/83
Counted By: [illegible] Date: 3/1/83

Graticle Field Area: .0028 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA: ______
Ceiling: ______

BASIS:
MSHA __ OSHA __ STATE __ UCC __
OTHER NIOSH

Scheduled Hours Per Shift: ______

WORKPLACE CONDITIONS:

Operations: Normal __ Not Normal ✓
Explain [illegible]
Ventilation: Type Exhaust system
Normal ✓ Not Normal __
Explain ______

WEATHER CONDITIONS:

Precipitation __ Cloudy __ Partly Cloudy ✓ Clear __
Wind: Calm __ Light ✓ Medium ✓ High __ Temperature 6_ °F

SAMPLING INFORMATION			INPUT DATA						RESULTS		
Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D. #	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks
											R4054
T2 69 / A 15		Gilian / T3222	10:31	11:56	1.5	4.5	100	85	.079		#883 Near R6244 [illegible] exhaust disposal (Raymond mill [illegible])
T 54 / A 15		Gilian / T3222	13:51	15:31	1.5	12.5	100	100	.188		#984 Same
								TWA	.138		

Form: UCC/MTLS-OH 82-4/2A

UCC 001399

ASBESTOS INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: Fm City I.D.#: 040106?
Worker Sampled:
Soc.Sec.#:
Job Description:
Sample Type: Personal __ Area ✓
Sampled By: C.B.C. Date: 1/25/83
Counted By: JS Date: 3/14/83
Graticle Field Area: .0058 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA:
Ceiling:

BASIS:
MSHA __ OSHA __ STATE __ UCC __
OTHER NIOSH

Scheduled Hours Per Shift:

WORKPLACE CONDITIONS:

Operations: Normal __ Not Normal ✓
Explain [illegible]
Ventilation: Type Exhaust system
Normal ✓ Not Normal __
Explain

WEATHER CONDITIONS:

Precipitation __ Cloudy __ Partly Cloudy ✓ Clear __
Wind: Calm __ Light __ Medium ✓ High __ Temperature 60 °F

SAMPLING INFORMATION			INPUT DATA					RESULTS			
Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D.#	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks
											NIOSH
D-59 / A-12		MSA / C3244	10:33	11:58	1.5	15.5	100	85	.274		#588 Over RG 244 bagger unit (~12 inches)
I-37 / A-12		MSA / C3245	13:54	15:31	1.5	15.5	100	97	.240		#985 same
							TWA		.256		

Form: UCC/HTLS-OH-82-4/2A

UCC 001400

ASBESTOS | INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: King City I.D.#: 040662
Worker Sampled: ____
Soc.Sec.#: ____
Job Description: ____
Sample Type: Personal ___ Area ✓
Sampled By: CB Date: 1/25/83
Counted By: ____ Date: ____
Graticle Field Area: .0058 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA: ____
Ceiling: ____

BASIS:

MSHA ___ OSHA ___ STATE ___ UCC ___
OTHER NIOSH

MSA pump setting 5.0

Scheduled Hours Per Shift: ____

WORKPLACE CONDITIONS:

Operations: Normal ___ Not Normal ✓
Explain: Barn Curing aid
Ventilation: Type: Exhaust system
Normal ✓ Not Normal ___
Explain: ____

WEATHER CONDITIONS:

Precipitation ___ Cloudy ___ Partly Cloudy ✓ Clear ___
Wind: Calm ___ Light ✓ Medium ✓ High ___ Temperature 60 °F

SAMPLING INFORMATION			INPUT DATA					RESULTS			
Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D.#	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	NIOSH Work Description/Remarks
D-49 A-5		MSA R82 6220	13:40	2:	1.5						#1019 Located ~ 14" above Main
											Cement Aggr. packer
		—	SAMPLE		NOT	FOUND —					
											Sample voided due
											to sample falling off
											support during test.

Form UCC/MILS-OH-82-472A

UCC 001401

ASBESTOS | INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: King City I.D.#: 040062
Worker Sampled: [illegible]
Soc.Sec.#: 572 · 48 · 2656
Job Description: [illegible] (Man Lumit)
Sample Type: Personal ✓ Area __
Sampled By: [illegible] Date: 1/26/83
Counted By: JB Date: 3/14/83
Graticle Field Area: .0038 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA: ____
Ceiling: ____

BASIS:
MSHA __ OSHA __ STATE __ UCC __
OTHER NIOSH

Scheduled Hours Per Shift: ____

WORKPLACE CONDITIONS:

Operations: Normal __ Not Normal ✓
Explain [illegible]
Ventilation: Type Exhaust System
Normal __ Not Normal ✓
Explain *

WEATHER CONDITIONS:

Precipitation ✓ Cloudy __ Partly Cloudy ✓ Clear __
Wind: Calm __ Light __ Medium ✓ High ✓ Temperature 60 °F

Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D.#	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks
											NIOSH
J-36 / P-1		Gilian / T 2429	8:05	10:00	1.5	106	50	115	2.765		#846 Bagging 56-103-5 (Auger Packer)
K-41 / P1		Gilian / T 2429	12:56	15:07	1.5	1255	100	131	1.437		#914 Same
							TWA		2.058		

* Ventilation duct for broken bag disposal unit in main circuit was plugged so it didn't work properly. May have been inoperative on 1/25/83 as well.

Form: UCC/MTI S-OH-82-4/2A

UCC 001402

ASBESTOS INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

PERMISSIBLE EXPOSURE LIMIT(S)

TWA:

Ceiling:

BASIS:

MSHA OSHA STATE UCC

OTHER

WORKPLACE CONDITIONS

Normal

Explain

Type

Normal

Explain

WEATHER CONDITIONS

Scheduled Hours Per Shift

Sample ID	Type	Start	Stop	Flow Rate (lpm)	Count Data Blank	Count Data Field	Duration (min)	Concentration f/cc	Concentration % SE	Analyst

UCC 001403

ASBESTOS INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: King City I.D.#: C4@1062
Worker Sampled: _____
Soc.Sec.#: _____
Job Description: _____
Sample Type: Personal ___ Area ✓
Sampled By: CJE Date: 1/26/83
Counted By: CJE Date: 5/14/83

Graticle Field Area: .0028 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA: _____
Ceilings: _____

BASIS:

MSHA ___ OSHA ___ STATE ___ UCC ___
OTHER NIOSH

Scheduled Hours Per Shift: _____

WORKPLACE CONDITIONS:

Operations: Normal ___ Not Normal ✓
Explain Clean by Vacuum
Ventilation: Type Exhaust system
Normal ___ Not Normal ✓
Explain see page 4

WEATHER CONDITIONS:

Precipitation ✓ Cloudy ___ Partly Cloudy ✓ Clear ___
Winds: Calm ___ Light ___ Medium ✓ High ___ Temperature 60°F

SAMPLING INFORMATION			INPUT DATA						RESULTS		
Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D.#	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks NIOSH
D-65 E-142		Gilian T3376	7:41	9:55	1.5	52.5	100	137	.575		#592 & 594 Clear dust from bagging work
L-24 A-142		Gilian T3376	12:42	15:10	1.5	35.5	100	148	.360		#592 & 594 same
							TWA		.463		dust cloud generated each couple minutes - 15:05 - 15:08 cleaning dust bagging of broken bag disposal fair check.

ASBESTOS | INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: Kan City I.D. #: 07-1062
Worker Sampled:
Soc.Sec. #:
Job Description:
Sample Type: Personal __ Area ✓
Sampled By: BR Date: 1/26/83
Counted By: JS Date: 3/14/83

Graticle Field Area: .00785 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA:
Ceiling:

BASIS:

MSHA __ OSHA __ STATE __ UCC __
OTHER NIOSH

MSA pump setting 5.0

Scheduled Hours Per Shift:

WORKPLACE CONDITIONS:

Operations: Normal __ Not Normal ✓
Explain: refer page 9
Ventilation: Type: Exhaust system
Normal __ Not Normal ✓
Explain: refer page 9

WEATHER CONDITIONS:

Precipitation ✓ Cloudy __ Partly Cloudy ✓ Clear __
Wind: Calm __ Light __ Medium ✓ High ✓ Temperature 66 °F

Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D. #	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	NIOSH	Work Description/Remarks
J-52 A 5		MSA R82-6226	7:46	9:58	1.5	78	100	132	.886		#912	Cross Mem [illegible] Hayes packs
K-35 A 5		MSA R82-6226	12:43	15:10	1.5	124.5	100	147	1.270		#956	Same
							TWA		1.088			duct cloud generated a
												last ten minutes 15:05 - 15:05
												during unclogging of broken
												bag clippings at duct

Form: UCC/MTI S-011-82-472A

UCC 001405

ASBESTOS | INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: King City I.D. #: 070106?
Worker Sampled:
Soc.Sec. #:
Job Description:
Sample Type: Personal __ Area ✓
Sampled By: [illegible] Date: 1/26/83
Counted By: [illegible] Date: 3/14/83
Graticule Field Area: .0028 mm² Type: WL

PERMISSIBLE EXPOSURE LIMIT(S)

TWA:
Ceiling:

BASIS:

MSHA __ OSHA __ STATE __ UCC __
OTHER NIOSH

Scheduled Hours Per Shift:

WORKPLACE CONDITIONS:

Operations: Normal __ Not Normal ✓
Explain [illegible]
Ventilation: Type Exhaust
Normal __ Not Normal ✓
Explain [illegible]

WEATHER CONDITIONS:

Precipitation ✓ Cloudy __ Partly Cloudy ✓ Clear __
Wind: Calm __ Light __ Medium ✓ High ✓ Temperature [illegible] °F

SAMPLING INFORMATION			INPUT DATA					RESULTS			
Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D. #	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks
											NIOSH
D-50 / A-2		Gilian / 7-2225	7:43	9:56	1.5	33.5	100	133	.378		#921 Area bag shaper
K-36 / A-7		Gilian / F-2125	12:44	15:08	1.5	16.5	100	144	.172		#925 same
							TWA		.271		dust cloud generated last couple of minutes due to unclogging of bathroom disposal air duct

Form UCC/MTL 5-OH 82-4/2A

UCC 001406

ASBESTOS INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: Kan City I.D. #: 646062

Worker Sampled: John Grachinko

Soc.Sec. #: 558-77-2631

Job Description: RG 244 Bagger

Sample Type: Personal ___ Area ✓

Sampled By: Cil Date: 1/26/83

Counted By: JS Date: 3/1/83

Graticule Field Area: .0038 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA: ___

Ceiling: ___

BASIS:

MSHA ___ OSHA ___ STATE ___ UCC ___

OTHER NIOSH

Scheduled Hours Per Shift: ___

WORKPLACE CONDITIONS:

Operations: Normal ___ Not Normal ✓

Explain: Bypassed [illegible]

Ventilation: Type: Exhaust systems

Normal ✓ Not Normal ✓

Explain: [illegible]

WEATHER CONDITIONS:

Precipitation ✓ Cloudy ___ Partly Cloudy ✓ Clear ___

Wind: Calm ___ Light ___ Medium ___ High ✓ Temperature [illegible] °F

SAMPLING INFORMATION: Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D. #	INPUT DATA: Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	RESULTS: Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks
											NIOSH
H-14 P3		Gilian 73327	8:05	9:56	1.5	135	100	111	1.824		#966 RG 244 bagger
											Bagger entered bagging unit for ~ 3 minutes
J 32 P3		Gilian 73327	12:52	15:01	1.5	91.5	100	129	1.064		#946 Same — same
								TWA	1.412		light dust noticed in
											general area. Source
											unknown. Followed up with
											B. Harvey

Form UCC/MTLS-OH-82-4/2A

UCC 001407

ASBESTOS INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: [illegible] I.D.#: 042106?

Worker Sampled:

Soc.Sec.#:

Job Description:

Sample Type: Personal__ Area ✓

Sampled By: [illegible] Date: [illegible]

Counted By: [illegible] Date: 3/14/83

Graticle Field Area: .0028 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA:

Ceiling:

BASIS:

MSHA__ OSHA__ STATE__ UCC__

OTHER NIOSH

Scheduled Hours Per Shift:

WORKPLACE CONDITIONS:

Operations: Normal__ Not Normal ✓

Explain [illegible]

Ventilation: Type [illegible]

Normal__ Not Normal —

Explain [illegible]

WEATHER CONDITIONS:

Precipitation ✓ Cloudy__ Partly Cloudy__ Clear__

Wind: Calm__ Light__ Medium ✓ High__ Temperature [illegible] °F

Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D.#	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	NIOSH	Work Description/Remarks
K 31 / A 15		Gilian / T 3377	8:00	9:56	1.5	12	100	116	.155		4944	[illegible] unit
C 21 / A 11		Gilian / T 3372	12:49	15:02	1.5	25	100	133	.282		4372	Same — [illegible]
							TWA		.223			[illegible]

ASBESTOS INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: [illegible] I.D.#: 0701062

Worker Sampled:

Soc.Sec.#:

Job Description:

Sample Type: Personal ___ Area ✓

Sampled By: [illegible] Date: 1/26/83

Counted By: [illegible] Date: 3/14/83

Graticule Field Area: .00328 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA:

Ceiling:

BASIS:

MSHA ___ OSHA ___ STATE ___ UCC ___

OTHER NIOSH

MSA Pump Setting 4.0

Scheduled Hours Per Shift:

WORKPLACE CONDITIONS:

Operations: Normal ___ Not Normal ✓

Explain [illegible]

Ventilation: Type Exhaust System

Normal ___ Not Normal ✓

Explain [illegible]

WEATHER CONDITIONS:

Precipitation ✓ Cloudy ___ Partly Cloudy ✓ Clear ___

Winds: Calm ___ Light ___ Medium ✓ High ___ Temperature [illegible] °F

Sample I.D. / Job Location	Respirator Type % Use	Pump Type I.D.#	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks
											NIOSH
I 52 / A 12		MSA C7249	8:01	9:56	1.5	8	100	117	.103		#890 Over RG 2/4 bagging unit
I 2[illegible] / A 12		MSA C7249	12.50	15:03	1.5	5.5	100	133	.062		#936 Same
							TWA		.081		

UCC 001409

ASBESTOS | INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: King City I.D.#: 0901062
Worker Sampled: [illegible]
Soc.Sec.#: 572-45-2656
Job Description: [illegible] (Main [illegible])
Sample Type: Personal ✓ Area __
Sampled By: [illegible] Date: 1/27/83
Counted By: [illegible] Date: 3/15/83

Graticle Field Area: .0058 mm² Type: WL

PERMISSIBLE EXPOSURE LIMIT(S)

TWA: ______
Ceiling: ______

BASIS:
MSHA __ OSHA __ STATE __ UCC __
OTHER NIOSH

Scheduled Hours Per Shift: ______

WORKPLACE CONDITIONS:

Operations: Normal __ Not Normal ✓
Explain [illegible]
Ventilation: Type Exhaust System
Normal ✓ Not Normal __
Explain ______

WEATHER CONDITIONS:

Precipitation ✓ Cloudy __ Partly Cloudy __ Clear __
Wind: Calm __ Light __ Medium __ High ✓ Temperature 51 °F

SAMPLING INFORMATION			INPUT DATA					RESULTS			
Sample I.D. / Job Location	Respirator Type & Use	Pump Type I.D.#	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks
											NIOSH
E-65 P1		[illegible] T7424	8:01	9:57	1.5	103	80	118	1.637		#925 Packing with Auger packer
A-76 P1		[illegible] T7424	12:15	15:19	1.5	87	110	124	1.052		#1005 Same
							TWA		1.337		

UCC 001410

ASBESTOS INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: King City I.D.#: 0401062
Worker Sampled: Manuel Segura
Soc.Sec.#: 544-44-9586
Job Description: C35-Pelletizer (Main Circuit)
Sample Type: Personal ✓ Area __
Sampled By: C.S. Date: 1/27/83
Counted By: JS Date: 3/16/83
Graticule Field Area: .0057 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA: ____
Ceiling: ____
BASIS:
MSHA __ OSHA __ STATE __ UCC __
OTHER MOSH
Scheduled Hours Per Shift: ____

WORKPLACE CONDITIONS:

Operations: Normal __ Not Normal ✓
Explain: Dumps bypassed
Ventilation: Type: Exhaust System
Normal __ Not Normal __
Explain ____

WEATHER CONDITIONS:

Precipitation __ Cloudy __ Partly Cloudy __ Clear __
Wind: Calm __ Light __ Medium __ High __ °c Temperature ____ °F

SAMPLING INFORMATION			INPUT DATA					RESULTS			
Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D.#	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks
											MOSH
C-30 / 1'2		Gilian / T-3373	8:02	10:01	1.5	34	100	119	.429		#444 Main Circuit Pelletizer
K-45 / 1'2		Gilian / T-3373	13:18	15:20	1.5	76	100	122	.934		#455 Same
							TWA		.685		

Form: UCC/MTI S-OH-82-4/2A

UCC 001411

ASBESTOS | INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: Bay City I.D.#: 040062
Worker Sampled:
Soc.Sec.#:
Job Description:
Sample Type: Personal __ Area ✓
Sampled By: [illegible] Date: 1/27/83
Counted By: [illegible] Date: 3/16/83
Graticle Field Area: .0038 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA:
Ceiling:

BASIS:
MSHA __ OSHA __ STATE __ UCC __
OTHER NIOSH

Scheduled Hours Per Shift:

WORKPLACE CONDITIONS:

Operations: Normal __ Not Normal ✓
Explain: [illegible]
Ventilation: Type
Normal ✓ Not Normal __
Explain

WEATHER CONDITIONS:

Precipitation ✓ Cloudy __ Partly Cloudy __ Clear __
Wind: Calm __ Light __ Medium __ High ✓ Temperature 55 °F

SAMPLING INFORMATION | INPUT DATA | RESULTS

Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D.#	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks
											NIOSH
A-16 / A-142		Gilian / T 3326	8:03	10:10	1.5	3	100	127	.035		927 & 438 Over main bagging unit
J-67 / A-142		Gilian / T 3326	13:16	15:21	1.5	76.5	100	125	.918		4003 & 1012 same
							TWA		.473		

ASBESTOS | INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: Ann City   I.D. #: 0701062

Worker Sampled: ______

Soc.Sec. #: ______

Job Description: ______

Sample Type: Personal ___ Area ✓

Sampled By: [illegible]   Date: 1/23/83

Counted By: 78   Date: 3/16/83

Graticle Field Area: .0038 mm^2 Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA: ______

Ceiling: ______

BASIS:

MSHA ___ OSHA ___ STATE ___ UCC ___

OTHER Niosh

MSA Pump Setting 5.0

Scheduled Hours Per Shift: ______

WORKPLACE CONDITIONS:

Operations: Normal ___ Not Normal ✓

Explain [illegible]

Ventilation: Type ______

Normal ✓ Not Normal ___

Explain ______

WEATHER CONDITIONS:

Precipitation ✓ Cloudy ___ Partly Cloudy ___ Clear ___

Wind: Calm ___ Light ___ Medium ___ High ✓ Temperature 51 °F

Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D. #	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks
											Niosh
C-22 A-5		MSA R12-6820	8:03	10:05	1.5	7.5	100	125	.093		#943 Man [illegible]
I66 A-5		MSA C12-1222	13:16	15:21	1.5	102.5	100	125	1.230		#1013 Same
								TWA	.660		

ASBESTOS INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: [illegible] I.D.#: [illegible]
Worker Sampled:
Soc.Sec.#:
Job Description:
Sample Type: Personal ___ Area ✓
Sampled By: [illegible] Date: 1/27/83
Counted By: 78 Date: 3/16/83
Graticle Field Area: .0058 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA:
Ceiling:

BASIS:
MSHA ___ OSHA ___ STATE ___ UCC ___
OTHER NIOSH

Scheduled Hours Per Shift: ___

WORKPLACE CONDITIONS:

Operations: Normal ___ Not Normal ✓
Explain [illegible] by [illegible]
Ventilation: Type
Normal ✓ Not Normal ___
Explain

WEATHER CONDITIONS:

Precipitation ✓ Cloudy ___ Partly Cloudy ___ Clear ___
Wind: Calm ___ Light ___ Medium ___ High ✓ Temperature 12 °F

Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D.#	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Fibers	Fields	Duration (Min)	F/cc	% of PEL	Work Description/Remarks
											NIOSH
K-3 / A-7		Gilian / I 3325	8:05	10:06	1.5	35	100	121	.043		#1018 [illegible]
D 26 / A 7		Gilian / I 3325	13:18	15:22	1.5	41	100	124	.496		#998 Same
								TWA	.272		

Form: UCC/MTLS-0H-62-4/2A

UCC 001414

ASBESTOS | INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: King City I.D. #: 040106?
Worker Sampled: John Gulinska
Soc.Sec.#: 558-47-7821
Job Description: RC 244 bagger
Sample Type: Personal ✓ Area __
Sampled By: JBC Date: 1/27/83
Counted By: JB Date: 3/14/83

Graticle Field Area: .0028 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA: ____
Ceiling: ____

BASIS:
MSHA __ OSHA __ STATE __ UCC __
OTHER NIOSH

Scheduled Hours Per Shift: ____

WORKPLACE CONDITIONS:

Operations: Normal __ Not Normal ✓
Explain: bagger unit not working properly
Ventilation: Type: Exhaust
Normal __ Not Normal ✓
Explain: bagger unit leaking dust

WEATHER CONDITIONS:

Precipitation ✓ Cloudy __ Partly Cloudy __ Clear __
Wind: Calm __ Light __ Medium __ High ✓ Temperature 53 °F

SAMPLING INFORMATION			INPUT DATA					RESULTS			
Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D. #	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks (NIOSH)
D-40 P3			8:11	8:14	1.5						Voided — Replaced bagger unit malfunctioning
"			9:31	10:04	1.5	112	100	33	5.071		
J-72 P3			13:28	15:14	1.5	96	100	106	1.358		≤1011 bagging RC-244 afternoon
								TWA	2.244		

UCC 001415

Form: UCC/MTI S-OH-02-4/2A

ASBESTOS INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: [illegible] I.D.#: 040106

Worker Sampled: ______

Soc.Sec.#: ______

Job Description: ______

Sample Type: Personal __ Area ✓

Sampled By: [illegible] Date: 1/27/83

Counted By: JB Date: 3/16/83

Graticle Field Area: .0038 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA: ______

Ceiling: ______

BASIS:

MSHA __ OSHA __ STATE __ UCC __

OTHER NIOSH

Scheduled Hours Per Shift: ______

WORKPLACE CONDITIONS:

Operations: Normal __ Not Normal ✓

Explain: Bagger unit not working properly

Ventilation: Type Exhaust

Normal __ Not Normal ✓

Explain: Bagger unit leaking dust

WEATHER CONDITIONS:

Precipitation ✓ Cloudy __ Partly Cloudy __ Clear __

Wind: Calm __ Light __ Medium __ High ✓ Temperature 53 °F

Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D.#	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks (NIOSH)
B-26 / A-15		Gilian T-3327	8:02	9:56	1.5	50.5	100	114	.664		VOIDED — Crane bag dispersal - bagging unit was repaired during morning
C-26 / A-16		Gilian T-3377	13:16	15:13	1.5	32	100	117	.410		~1055 — Bagging RO 244 note - when sampler fell on floor at ~14:30
								TWA	.535		

UCC 001416

ASBESTOS | INDUSTRIAL HYGIENE SAMPLE SUMMARY

IDENTIFICATION

Plant: King City I.D.#: 0401062
Worker Sampled:
Soc.Sec.#:
Job Description:
Sample Type: Personal__ Area ✓
Sampled By: [illegible] Date: 1/27/83
Counted By: JB Date: 3/6/83
Graticle Field Area: .0038 mm² Type: WB

PERMISSIBLE EXPOSURE LIMIT(S)

TWA:
Ceiling:

BASIS:
MSHA__ OSHA__ STATE__ UCC__
OTHER NIOSH

MSA Pump Setting 4.0

Scheduled Hours Per Shift:

WORKPLACE CONDITIONS:

Operations: Normal__ Not Normal ✓
Explain [illegible]
Ventilation: Type Exhaust System
Normal__ Not Normal ✓
Explain [illegible]

WEATHER CONDITIONS:

Precipitation ✓ Cloudy__ Partly Cloudy__ Clear__
Wind: Calm__ Light__ Medium__ High ✓ Temperature 23 °F

SAMPLING INFORMATION			INPUT DATA					RESULTS			
Sample I.D. / Job Location	Respirator Type / % Use	Pump Type / I.D.#	Time Start (Hr:Min)	Time Stop (Hr:Min)	Flow Rate (lpm)	Count Data Fibers	Count Data Fields	Duration (Min)	Concentration F/cc	Concentration % of PEL	Work Description/Remarks
											NIOSH
B-53 A-12		MSA 02244	8:03	8:14	1.5	405	100	11	5.523		[illegible] Clean RC-244 ~~[illegible]~~ bagging unit (unit being repaired)
L-55 A-12		MSA 02244	13:16	15:14	1.5	4	100	118	.051		[illegible] Bagging RC244
								TWA	.518		

Form: UCC/MTLS-OH-82-4/2A

UCC 001417