CC for
R. T. Larkin
J. W. Rawlings
~~King~~ City, File
Niagara Falls, File
H. McGowan, Detroit

Calidria ASBESTOS

UNION CARBIDE CORPORATION

P.O. Box 579 Niagara Falls, N.Y. 14302

DISTRIB: F.H. Lorig, R.O. Mercer, R.O. Hopper, R.J. Krenkhyte, B.E. Usroy, R. Grogan, J.M. Anderson, A.A. Andrade, K.T. Wood, G.L. Vessels, K. West, D. Garcia, File

PLAINTIFF'S EXHIBIT
UC-546

By R. E. Byrne
T. P. Norris

Date 8-6-71

Full Name Address G. M. Tech. Center Manufacturing Development Mound & 12 Mile Road Warren, Mich Mfrs. of	Interviewed Paul Sandoz

We have sampled G. M. with SG-210 to replace the non-working filler portion of their low profile polyester sheet molding compound (SMC). The intent is to improve impact resistance. At a 10% loading, impact was improved and although viscosity was high they were able to wet the glass properly. With a low viscosity resin, loading was increased to about 12%, impact improved marginally, but had poor profile. As of this date evaluations have halted, and unless we can come up with a way for them to incorporate more asbestos, wet out properly, maintain profile and greatly increase impact resistance, the project will remain closed.

Toxicology was also discussed. Paul indicated that their production people exhibited concern over the potential of using asbestos.

RECEIVED
AUG 26 1971
UCC - CALIDRIA
KING CITY, CA.

Published by AsbestosClaims.Law
asbestosclaims.law/library/15784/1

CC for

J. E. Walsh
R. E. Byrne
KC-File
NF-File

UNION CARBIDE CORPORATION

P.O. Box 579 Niagara Falls, N.Y. 14302

T. P. Norris
By [redacted]

Date 1-4-73

Full Name General Motors Corp Address Delco Moraine Div. 1420 Wisconsin Blvd. Dayton, Ohio 45401 Mfrs. of	Interviewed Jim Miller, Engineering Dept. Brake Lining Dr. Bill Krebs, Research Administrat Warren, Mich

OBJECTIVE

Attempt to track down source of rumored asbestos "GM Ban"

DISCUSSION

For many months now we have labored with our customers concerns over their supplying various GM locations asbestos contained Plastisols, Sealants, Adhesives etc. Our feedback has been that there was a growing GM ban on asbestos and GM was refusing shipments of asbestos contained products.

Contact was made with their Delco Moraine Div., as we were advised they were working on an asbestos free brake lining. We learned that although they were indeed working on an asbestos free brake lining, the motiv ating force behind these evaluations was not OSHA but rather the improved braking standards necessary to meet the 1975 Govt. Regulations on Auto Braking Distances. The brake lining as we know it today may not exist in 1975, because the requirements are for a radically shortened braking distance and the composition of asbestos, phenolic etc. may not be enough to withstand the heat buildup. They are looking at mineral wool, steel wool and a host of other products including asbestos in their evaluations. If they can arrive at the right composition of materials and it contains asbestos it will continue to be used. The important factor to note here is that the impetus for the evaluation was technological rather that OSHA inspired.

The Delco plant has samples of our pellets and expressed an interest in doing some work related to brake linings or clutch facings. They feel it is a unique product.

Published by AsbestosClaims.Law
asbestosclaims.law/library/15784/2

CC for

UNION CARBIDE CORPORATION

P.O. Box 579 Niagara Falls, N.Y. 14302

By _____

Date _____

Full Name General Motors Corp. Address Mfrs. of	Interviewed

We are also in the process to set up a meeting with their Industrial Hygiene group, located at the Technical Center Warren, Mich. We will discuss with Dr. Bill Krebs, safe methods of handling asbestos including our own pellets. There is no "GM Ban", the Industrial Hygiene dept. simply advises the plants that if they want to continue using asbestos, they be aware of the TLV, and take the necessary precautions to protect the workers. If these precautions place an undue financial burden on individual plants, then that plant management has the option of looking for substitute materials.

CC for
W. C. Thurber, N.Y.
R. E. Byrne, N. F.
J. E. Walsh, Atlanta
N. F. File
K. C. File

Calidria Asbestos

UNION CARBIDE CORPORATION

P.O. Box 579 Niagara Falls, N.Y. 14302

By T. P. Norris

Date 6-21-73

Full Name: General Motors Corp. Fisher Body Div. Address: 12 Mile & Mound Road Warren, Mich 48090 Mfrs. of: 313-575-5747	Interviewed Harold Beckerleg, Research

TELECON

This call was an attempt to arrange a round table discussion on the use of RG 144 in GM lead solder replacement program.

We are aware of two customers, H. B. Fuller, and Ohio Sealer, who have developed an Epoxy System containing RG 144 to replace the present lead solder program. Both customers have advised us that because the system contained asbestos, GM would do no further evaluation work, even though the data to date demonstrate their superiority over the present lead solder program. Both GM and Ohio Sealer have done elaborate dust count work on the grinding and sanding of finished parts and come up with a zero count, but to no avail. GM's Medical Dept. says that as long as it contains asbestos and is ground or sanded it will not be considered for evaluation. The Mortell Co. has also advised us of difficulties in supplying Fisher Body.

Beckerleg was adament that a meeting would be fruitless. The decisions have already been made that if a compound supplied to Fisher Body, contained asbestos, and is ground or sanded that product be either reformulated or banned. The key areas here are grinding or sanding, regardless of the fact it does not exceed the OSHA limits both present or future. For the time being adhesives and sealants would not be affected as long as they meet the above creteria.

He assured me that this was a Medical Dept. decision and that if we were desireous of changing their position our future contacts should be in that area. We should contact Vincent Castrob and arrange a meeting, as he is the key to our future in the GM plants. Both Ohio Sealer and H. B. Fuller estimated a large potential for RG 144 in this application.

c for T. P. Norris
W. C. Thurber
J. E. Walsh
KC-File
NF-File

Calidria ASBESTOS

AUG 16 1973

UCC - CALIDRIA
KING CITY, CA.

UNION CARBIDE CORPORATION
P.O. Box 579 Niagara Falls, N.Y. 14302

J.M. Anderson ☐
A. A. Andrade ☐
C. F. [illegible] ☐
R. L. G[illegible] ☐
P. O. [illegible] ☐
H. L. Sod[illegible] ☐
B. E. Us[illegible] ☐
By H. B. Rhodes ☑
D. J. Garcia ☐
Date 8/10/73 [illegible]els ☑
M. K. West ☐
File ☑

Full Name	General Motors	Interviewed
	3-229 Res. Adm. Building	
Address	G.M. Gechnical Center	Dr. W. H. Krebbs
	12 Mile & Mound Roads	
Mfrs. of	Warren, Michigan 48090	(Telecon)
	(313) 575-2791	

OBJECTIVE

Set up meeting with Castrob to discuss reports that their divisions were refusing to consider any products containing asbestos which were cut or abraided.

OBSERVATIONS

Dr. Krebbs reiterated their basic position that the plants can use asbestos where they need to use it. If there is a convenient alternate, they are obviously encouraged to use it. The only place where things get sticky are cases where product liability is involved, i.e., where a passenger or a mechanic could be exposed to asbestos dust.

The only directives that he knows about are a letter from a V.P., George Morris, advising everyone that OSHA was here to stay and they would have to learn to live with it and a 100-page manual which Krebbs himself wrote in part on the OSHA law and what was required for compliance.

It was agreed, somewhat reluctantly, that he and Mr. Castrob would meet with us on the morning of August 17.

He also mentioned that Fisher Body had tended to back off somewhat on their anti-asbestos position.

It is my opinion that the various plant managers are putting a lot of pressure on suppliers to eliminate asbestos wherever practical and economical. This is within their authority and guidelines. A convenient mechanism to pursue this is to blame it on a corporate edict. I see no reason not to believe Krebbs statement that there is no such edict, formal or informal.

Typed 8/13/73
cjb

NOV 9 1973

UCC - CALIDRIA
KING CITY, CA.

CC for
W. C. Thurber
J. E. Walsh
KC-File
NF-File

UNION CARBIDE CORPORATION

P.O. Box 579 Niagara Falls, N.Y. 14302

R. J. Kronkhyte
J.M. Anderson
A. A. Arkwright
C. F. Grogan
R. L. Grogan
R. O. Hopper
H. L. Seay
S. D. Urey
D. E. Clark
D. L. Garcia
G. L. Vessels
M. K. West
File

J. L. Myers
W. C. Thurber
By T. P. Norris
Date 8-10-73

Full Name Address Mfrs. of	GENERAL MOTORS CORP. Tech. Center 12 Mile & Mound Road Warren, Mich 48090	Interviewed Walt Konn, Industrial Hygiene Staff Dr. Bill Krebs, " " " Vincent Castrop, Director " "

The purpose of this meeting was to clarify certain aspects of the alleged asbestos ban.

The G.M. position is as reported earlier that they will continue to advise the various assembly & production plants that whereever possible asbestos replacements be found. They continue to have very strong feelings on this subject and have adopted the philosophy that " If it can happen, it will". This is in reference to the fact that if it is at all possible for an asbestos fiber to become airborne, regardless of binder etc, it will in fact occur. This fact, over a period of time, opens them up to potential law suits, i,e, they are presently defending themselves against a $ 500,000 suit by a former employee who engaged in the application of asbestos - contained (48%) undercoating.

In the future, in order for G,M. to utilize asbestos contained products, that product will have to have an over-riding superiority of physical properties than those normally present in a non-asbestos product. The burden of proof lies with the supplier. For example, they continue to use asbestos in brake linings because it outperforms a non-asbestos product.

On the question of the Lead Solder replacement program, Castrop indicated that cost to implement the program amounted to $ 1 MM each plant and was largely responsible for killing the program. They could see no advantage why GM should substitute one toxic material for another, plus a substantial cash outlay, when the potential for more strigent Federal regulations re; asbestos and the likelihood of employee suits prevailed.

RECEIVED
AUG 31 1973
UCC - CALIDRIA
KING CITY, CA.

REPORT OF CALL

CC for
W. C. Thurber
J. W. Walsh
KC-File
NF-File

R. J. Kronkhyte ☑
J.M. Anderson ☐
A. A. Andrade ☐
C. F. Grogan ☐
R. L. Grogan ☐
R. O. Hopper ☐
H. L. Seay ☐
B. E. Usrey ☐
D. E. Clark ☑
D. J. Garcia ☐
G. L. Vessels ☑
M. K. West ☐
File ☐

Calidria

UNION CARBIDE CORPORATION

P.O. Box 579 Niagara Falls, N.Y. 14302

By T.P. Morris

Date 8-14-73

Full Name	GENERAL MOTORS CORP. Tech. Center	Interviewed
Address	12 Mile & Mound Road Warren, Mich. 48090	
Mfrs. of		

UPDATE REPORT

The asbestos problem at General Motors dates back to about 1969, when GM management decided to eliminate it from their products. Among the first to switch over to a non-asbestos product was the Harrison Radiator Div. who had used 8 to 15 tons a day of JM 7TF1, for their polyester premix application. A fine clay was subsituted for the asbestos, and although their reject rate increased 2 to 3 times, with product quality and economics suffering also, they were adamant in refusing to evaluate HPP.

Since that time and to this day the rumored GM asbestos ban has prevailed. Altough to my knowledge nothing has been written down in letter form from GM to their suppliers, it is known that product formulations list toxic materials and accompany samples from GM evaluations. If the product contains asbestos it is not evaluated, or if it is, it must be reformulated without asbestos before final acceptance from the GM labs.

The immediate impetus for this high level meeting was the refusal by GM to accept an Epoxy base resin containing RG 144 to replace the present lead solder program. The use of lead solder dates back historically to auto fabrications, but again due to Gov't regulations there has been a desire to find a replacement. Both Ohio Sealer and H. B. Fuller, plus unknown other suppliers, have submitted acceptable material to GM and had it shot down because it contained asbestos.

Published by AsbestosClaims.Law
asbestosclaims.law/library/15784/7

REPORT OF CALL

CC for

UNION CARBIDE CORPORATION

P.O. Box 579 Niagara Falls, N.Y. 14302

PAGE 2

By T.P. Norris

Date 8-14-73

Full Name GENERAL MOTORS CORP.	Interviewed
Address	
Mfrs. of	

GM and Ohio Sealer did elaborate dust counts, including Electron Scanning, of actual production trials, and although the results indicated zero asbestos fiber levels, the products were rejected because they contained asbestos. Whether or not asbestos is guilty per se, or is a contributing along with skin sensitivity of employees to expoxy resin, initial increased capital expenditures, plus the basic increased cost of the expoxy system versus the lead solder system, it still comes out the same, i.e, the product is rejected because it contains asbestos.

The continuing concern of the following customers who supply various materials to the GM plants and other auto related businesses should be our concern also.

Ohio Sealer Corp.
Dayton, Ohio

H. B. Fuller
Minneapolis, Minn.

Mortell Co.
Kankekee, Ill.

Tuff Cote Inc.
Detroit, Mich.

Chemical Sealing
Kansas City, Mo.

The above customers represent both a realized potential and future potential if they continue to evaluate our products to replace either other Canadian grades or Cab-o-sil.

Published by AsbestosClaims.Law
asbestosclaims.law/library/15784/8

CC for

UNION CARBIDE CORPORATION

P.O. Box 579 Niagara Falls, N.Y. 14302

PAGE 2

By T.P. Norris

Date 8-14-73

Full Name GENERAL MOTORS CORP. Address Mfrs. of	Interviewed

The very nature of our business is sales development which can, especially with RG grades, take 2-3 years of R&D efforts before orders begin to materialize. It is precisely this time period that could affect our future business, because as we contemplate King City expansion plans based on present sales and future growth, by the time expansion is completed (1975) we could re-formulated out of present compounds and if there is no ongoing R&D work on RG grades, it could seriously hamper out continued growth and very exsitence.

c for R. E. Byrne, Jr.
K. S. Chopra
B. L. Ingalls
E. J. Kleber
J. L. Myers
W. C. Thurber
KC-File ✓
NF-File

Calidria ASBESTOS

UNION CARBIDE CORPORATION
P.O. Box 579 Niagara Falls, N.Y. 14302

By H. B. Rhodes

Date 3/20/75

Full Name General Motors Research Lab. Address Warren, Michigan Mfrs. of	Interviewed Dr. W. Krebs (Telecon) 313-575-2791

BACKGROUND

We presently have a substantial amount of fiber count data for spraying and grinding of plastic which generally give counts that are low but clearly above background. It is our opinion that in most cases all or a majority of the fibers reported as asbestos are not actually asbestos. Taken at face value, our numbers suggest that substantial numbers of employees in fabrication shops where asbestos-containing parts are sanded or ground must have physical examinations to comply with OSHA regulations. There is hope that this question will eventually be taken care of by changes in the regulations but this looks like at least nine months away. In the meanwhile, this problem is a major obstacle to the acceptance of RG-244 at Dow Chemical.

OBJECTIVES

Our considerable attempts to resolve this analytical problem have no far been erratic, i.e., sometimes looked good and sometimes inconsistent. This call was made in the hope that we could get some useful ideas from General Motors.

Dr. Krebs was most cooperative and helpful. He noted that they had, undoubtedly, faced the problem with "Calidria" asbestos in certain of the Ohio Sealer products. Their basic procedure is as follows:

1. The sample is counted and examined by the NIOSH procedure at 400X. The general types of "fibers" present are observed and "memorized."

2. Same procedure as #1 is repeated at 900X.

3. The sample is checked under Nomarski illumination. This is generally, but not always, very helpful in spotting which are asbestos. It is, however, an operator exercising a limited amount of judgment and recording an observation. It is not an absolute proof.

4. The sample (on the filter) is shadowed with gold and examined at 2,000-10,000X in the SEM. The several general types of "fiber" seen optically are found and analyzed by electron dispersion with photos of both the "fiber" and its analysis taken. The proportions of the types of fiber making up the total are also checked visually and qualitatively.

The basic objective here is to build up a file of absolute and irrefutable evidence of the amount and type of fiber exposure that can be used in the future, if necessary, as defense in court.

Our approach was similar but differed in two key points:

1. The staining technique was used instead of the Nomarski.

2. The SEM was to be used at lower magnifications as an actual counting procedure, not as a qualitative or, at best, semi-quantitative fiber identification device.

Apparently, G.M. does not encounter the problem we seem to have experienced with the loss of nonasbestos particles from the filter on handling. We can certainly attempt, with a reasonable probability of success, to apply this approach to our grinding samples. It is fairly expensive, however, relative to a simple OSHA count.

Dr. Krebs also offered that their expert, Thomas P. Schreiber (313-575-2797), would be glad to discuss the SEM techniques with us. We will, undoubtedly, take him up on this.

He also mentioned that they had gotten into a real argument with NIOSH over the PAT program. G.M., using the best equipment, consistently got higher fiber counts than anyone else. NIOSH would not certify them as competent. This has finally been resolved in their favor.

RECOMMENDED ACTION

KSC Discuss their technique with Tom Schreiber.

Key questions:

1. How filter is mounted?

2. Possible loss of material?

3. Fiber analysis technique?

Typed 3/21/75
cjb

CUSTOMER CALL REPORT

CUSTOMER & LOCATION General Motors - Detroit, MI

INDUSTRY CLASSIFICATION

SALESMAN H. B. Rhodes

REGION

DATE OF CALL 10/20/77

PRODUCTS DISCUSSED:

Cr	Mn	Spec.	Si	CaC_2	W	V	Asb.
☐	☐	☐	☐	☐	☐	☐	X

Other:

PERSONS INTERVIEWED: Dr. William Krebbs, Manager Toxic Materials Control
Mrs. Margo Parker, Corporate Governmental Relations

CALL OBJECTIVE: Rescind Fisher Body ban on testing any new products containing asbestos.

RESULTS OF CALL:

Dr. Krebbs took the position that the caulk and sealants presented no hazard and there was no need to get rid of asbestos. The sprayed sound deadeners, however, were generally a messy operation with asbestos only part of the problem. He would like to see a better overall procedure developed.

Following this meeting, Dr. Krebbs and the writer met with Mrs. Margo Parker of the G/M Corporate Governmental Affairs staff. Mrs. Parker, who has high-level responsibility for State activities, had been heavily involved last spring in the New Jersey spraying regulations. As a consequence of this, Mr. Beckerleg had received a suggestion that an alternate to spraying sound deadeners should be investigated.

Mr. Krebbs restated his position re caulks and sealants and there was no disagreement. It appears that any pressure from Mrs. Parker in this area was headed off.

On October 24, 1977 the writer followed-up with Mr. Beckerleg. Dr. Krebbs had talked to him and stated that there was nothing in the offing to ban asbestos in caulks and sealants and it was not necessary. Coming from the Toxic Materials Control Manager, this appeared to carry considerable weight and the ban on looking at asbestos-containing materials has been rescinded.

FOLLOW-UP ACTION REQUIRED:

EJK - Regular contact.

COPIES TO: JRL:TPN:WCT:JEW:KC-FILE:NF-FILE ✓

CUSTOMER CALL REPORT

CUSTOMER & LOCATION: General Motors, Fisher-Body Div., Warren, MI

INDUSTRY CLASSIFICATION: Autos

SALESMAN: Edward J. Kleber REGION: Midwest DATE OF CALL: 9/19/79

ASBESTOS HEALTH & REGULATORY DOCUMENTS PROVIDED:

- ☐ MSDS
- ☐ Health & OSHA Information Blue Book
- ☐ Dust Count Report
- ☐ Other, specify below

PERSONS INTERVIEWED: Henry Johnson

CALL OBJECTIVE: Determine Fisher Body's policy regarding asbestos.

RESULTS OF CALL:

Henry said that although he personally thinks it is ridiculous, the G.M. policy is to accept no new sealants containing asbestos. Obviously, if this policy continues our business to the auto sealant suppliers will dwindle over the next few years. Henry left us only one hope. He has never seen this policy in writing and suggested we (&he) contact Bill Krebs to make sure they are interpreting the policy correctly.

FOLLOW-UP ACTION REQUIRED:

EJK - Contact Krebs.

COPIES TO: JRL:TPN:JEW:KC-FILE:NF-FILE NF PERMANENT FILE ☐

dal 9/28/79

CUSTOMER & LOCATION General Motors Corporation Fisher-Body Division Warren, MI

INDUSTRY CLASSIFICATION Automobiles

SALESMAN Edward J. Kleber w/ J. L. Myers

REGION Midwest

DATE OF CALL 2/15/79

ASBESTOS HEALTH & REGULATORY DOCUMENTS PROVIDED:

- ☐ MSDS
- ☐ Health & OSHA Information Blue Book
- ☐ Dust Count Report
- ☐ Other, specify below

PERSONS INTERVIEWED:

Jim Collins - Department Head
Ted Lasko - Collins' Assistant

CALL OBJECTIVE:

Determine Fisher-Body's position on sealants containing asbestos.

RESULTS OF CALL:

There has been a major re-organization at Fisher-Body as it applies to the vinyl sealer business. The former organization had Harold Beckerleg as the department head and Mike Coccozoli as Harold's assistant and the man in charge of approving sealers. Harold Beckerleg recently retired, and his position was taken by Jim Collins. Ted Lasko came over from the corrosion department and currently runs the vinyl sealers. Mike Coccozoli is still there, and quite frankly, we don't know exactly how Lasko and Coccozoli fit in except that Coccozoli now reports to Lasko. The purpose of the meeting was to find out how Collins and Lasko felt about the use of asbestos in their sealers.

From the outset Jim Collins made it very plain that he was totally unfamiliar with the asbestos situation. He deferred most questions and discussions to Ted Lasko. Ted does seem to be very familiar with asbestos, how it's used, where it's used, etc. He did not seem to be aware of any ban or prohibition by Fisher-Body. He did mention that he was familiar with a few instances, for example, he told us that Ohio Sealer was within a whisker of obtaining a large volume of General Motors business in the epoxy solder area. The reason they were not approved was because the material contained RG-244. General Motors felt that since this material had to be abrated, the potential for release for asbestos fibers was present and, therefore, the material was unacceptable. Ted did say that he did not see a problem in the areas where you laid down a bead, or where sealers

(OVER)

FOLLOW-UP ACTION REQUIRED:

EJK - It is imperative we get closer with Lasko so that we may better define his policy, the Fisher-Body organization, and what we need to do to keep the sealers coming into General Motors.

COPIES TO: JRL:TPN:JEW:KC-FILE:NF-FILE

NF PERMANENT FILE ☐

dal 3/13/79

CUSTOMER CALL REPORT

CUSTOMER & LOCATION General Motors Research Warren, MI

INDUSTRY CLASSIFICATION Friction Product

SALESMAN Edward J. Kleber REGION Midwest DATE OF CALL 1/15/79

ASBESTOS HEALTH & REGULATORY DOCUMENTS PROVIDED:

- ☐ MSDS
- ☐ Health & OSHA Information Blue Book
- ☐ Dust Count Report
- ☐ Other, specify below

PERSONS INTERVIEWED:

Ed Miller - Assistant Head, Metallurgy
Tom Flaim - Ceramicist

CALL OBJECTIVE:

Determine status of "Calidria" in friction products program.

RESULTS OF CALL:

Although Ed Miller does not necessarily agree, the decision has been made by General Motors to eliminate asbestos in friction products by 1985. This effectively kills the "Calidria" program. As far as can be determined, this should affect only the friction products and not the sealers or any other area for that matter. GM biggest concern is third party lawsuits resulting from sanding being done in small brake shops over which they have no control. They currently feel they'll have no trouble meeting this edict with disc brakes, however, the technology in the drum brake area is not yet available. This decision has been made by their General Technical Committee at the corporate level, and there doesn't seem to be anything we can do about it.

FOLLOW-UP ACTION REQUIRED:

EJK - It probably would be a good idea to check in with Ed twice a year or so and see how things are going.

COPIES TO: JRL:TPN:JEW:KC-FILE:NF-FILE NF PERMANENT FILE ☐

dal 3/14/79