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Denver
Salt Lake City
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Re: Response to Second Request for Information; Libby, Montana

Dear Ms. Land:

Enclosed please find W.R. Grace's response to the Second Request for Information Regarding the Libby Asbestos site.

If you have further questions, please do not hesitate to call.

Very truly yours,

Kenneth W. Lund

Kenneth W. Lund

KWL:cg
Enclosures
cc: David M. Cleary

W.R. GRACE & CO. - CONN.
RESPONSE TO THE SECOND REQUEST
FOR INFORMATION REGARDING THE LIBBY ASBESTOS SITE

GENERAL OBJECTIONS

W.R. Grace & Co.-Conn. ("Grace") makes the following General Objections:

1. Grace objects to the Request, and to each paragraph therein, on the grounds that it is overly broad, unduly burdensome and prohibitively time consuming, and some of the information requested could be located and identified as easily by the U.S. Environmental Protection Agency ("EPA") as by Grace.

2. Grace objects to the Request, and to each paragraph therein, to the extent it calls for information or documents that are protected under the attorney-client privilege or the work product doctrine.

3. Grace objects to the Request, and to each paragraph therein, to the extent the Request seeks to impose on Grace an obligation to obtain information or documents from third persons or others, which are not in Grace's custody or control.

4. Grace objects to the Request, and to each paragraph therein, to the extent that it calls for disclosure of information subject to Montana's constitutionally protected right to privacy.

5. Grace objects to the Request, and to each paragraph therein, to the extent that it calls for disclosure of confidential information in which there is an actual and reasonable expectation of privacy.

6. Grace objects to the Request, and to each paragraph therein, to the extent that it calls for disclosure of confidential information to the extent that it could subject Grace to claims by persons or entities asserting that such information was impermissibly disclosed.

7. Grace objects to the Request, and to each paragraph therein, to the extent that it calls for the disclosure of confidential or proprietary business information and/or information protected under various trade secret and intellectual property laws.

8. Grace objects to the Request, and to each paragraph therein, to the extent that it seeks to impose on Grace an obligation or obligations outside the purview of EPA's authority under 42 U.S.C. § 9604(e).

9. The following answers are based upon facts known or believed by Grace at the time of answering these questions. Much of the information is sought from many years ago and is, therefore, difficult or impossible to reconstruct or retrieve. Grace therefore reserves the right to amend these answers as and if new or better information becomes available to

it or if errors are discovered. Further, Grace will be producing documents in response to EPA's First Information Request (letter dated December 7, 1999 as amended by letters dated January 6, 2000 and January 28, 2000) which likely contain additional information relevant to these questions. In answering these questions, Grace sought assistance from current employees as well as other individuals generally familiar with the history of the Libby facility and the documents; however, EPA did not provide Grace with adequate time to review all of the documents potentially relevant for answering these questions.

OBJECTIONS TO THE INSTRUCTIONS AND DEFINITIONS

Without waiving or limiting its General Objections, Grace makes the following objections to the Instructions and Definitions, and to all requests for information that purport to use these Instructions and Definitions:

1. Grace objects to Definition No. 1, and to all questions that purport to utilize this definition, insofar as they apply to "contractors, trustees, partners, predecessors, successors, assigns and agents" on the grounds that the definition is overly broad and that to respond to any request using this definition would be unduly burdensome and prohibitively time consuming. Grace also objects to this definition to the extent that it seeks information or documents from third persons or others, which are not in Grace's custody or control.

2. Grace objects to Definition No. 3, and to all questions that purport to utilize this definition, on the grounds that the definition of "Facility" or "Site" is vague, ambiguous, overly broad and unduly burdensome. In particular, Definition No. 3 provides that the term Facility or Site includes locations "near the town of Libby, Montana, " "all associated facilities," and "any other former W.R.Grace facilities located in/or near the town of Libby, Montana" but fails to draw a distinct boundary or location of what comprises the Site or Facility. Absent a reasonable or coherent definition of that term, Grace cannot reasonably ascertain the location or boundaries of the Site or Facility which is subject to the Request.

3. Grace objects to Definition No. 5, and to all questions that purport to utilize this definition, on the grounds that the definition is overly broad, vague and ambiguous to the extent definition includes information regarding "<u>all substances</u> that have been generated, treated, stored, or disposed of or otherwise handled at or transported to the Site." The term "all substances" is not defined and is subject to differing opinions as to its ordinary meaning. Grace further objects to Definition No. 5 to the extent that it purports to utilize the definition of "Site" contained in Definition No. 3.

4. Grace objects to Definition No. 6, and to all questions that purport to utilize this definition, on the grounds that the definition is overly broad, vague and ambiguous to the extent definition provides that "ore shall be interpreted to mean all rocks and materials" containing a variety of materials. The definition of ore is also vague, overly broad and

ambiguous because it implies that any material containing even trace or background levels of these materials may be deemed to come within the definition of "Ore".

5. Grace objects to Definition No. 7 and to all questions that purport to utilize this definition, on the grounds that the definition is overly broad, vague and ambiguous. Grace further objects to Definition No. 7 to the extent that it purports to utilize the definition of "Ore" contained in Definition No. 6.

QUESTIONS

Question 1:

List the name, address, phone number, corporate title or job description for each person who contributed to these answers. The person or persons who answered any question should be identified in each answer by their initials.

Response Question 1:

Grace incorporates here by reference its General Objections and its Objections To The Instructions and Definitions. Grace further objects to Question 1 as vague, ambiguous, overly broad and unduly burdensome to the extent that it requests information regarding anyone to "contributed" to these responses. The term "contributed" is not defined and is subject to differing opinions as to its ordinary meaning. Grace further objects to Question 1 to the extent it calls for information protected under the attorney-client privilege or the work product doctrine. Without waiving these objections, Grace responds as follows:

1. Alan R. Stringer, W.R. Grace & Co.-Conn., [redacted]; former Libby mine superintendent and general manager.

2. Eric Moeller, Sales & Marketing Manager, W.R. Grace & Co., Grace Specialty Vermiculite, [redacted]; former geologist at Libby mine.

Question 2:

List the location for all facilities, owned, leased or operated by WRG at any time between the purchase and the closure of the Zonolite Mine in Libby, Montana (including, but not limited to: the Zonolite Mine itself, the export facility, the sizing, screening facility, the facility located near the ball fields and the exfoliation plant) located in Lincoln County, Montana.

Response Question 2:

Grace incorporates here by reference its General Objections and its Objections To The Instructions and Definitions. Grace objects to Question 2 as vague, ambiguous, overly broad and unduly burdensome to the extent that it seeks information regarding the "Zonolite Mine", the

"export facility," the "sizing/screening facility," a facility located "near the ball fields," and an exfoliation plant "located in Lincoln County, Montana". These terms are not defined and Question 2 fails to adequately identify the location or boundary of the "facilities" or "sites"subject to this request. Without waiving these objections, Grace responds as follows:

Grace owned or leased the following parcels of land in Lincoln County: (1) the mine and mill area located approximately 8-9 miles north of Libby, Montana (on Rainey Jackson Creek access road); (2) the screen or loading facility located approximately 5 miles north of Libby on Highway 37 and included approximately 255 acres on both sides of the Kootenai River; (3) a parcel of approximately 19 acres was in the City of Libby next to the river just off Highway 37 (adjacent to two little league ball fields which were on Grace property), this parcel included the office and a small area containing bagging, storage, and miscellaneous facilities, an expanding plant was located on this parcel from sometime in the 1930s to approximately 1969 or 1970; this parcel is sometimes referred to as the "export" area; (4) an approximately 5 acre parcel was owned by Grace and used as a public ball field adjacent to St. John's Hospital, located at Louisiana and 3rd in Libby; (5) an office at 317 Mineral Avenue in Libby, presumably leased by Grace, used as the mine manager's and sales office; and (6) a half-acre parcel leased by Grace adjacent to the Burlington Northern railroad. Although Grace has no specific information at this time, Grace may have used or owned one or more other parcels in Lincoln County between 1963 and 1990. *ARS*

Question 3:

With respect to each facility so identified, provide the following information:

a. Years of operation.
b. A description of the operation(s) (e.g. sizing and/or screening) that were performed at each such location and the purpose of each such operation.
c. A description of the raw materials and finished products introduced and produced at each such location
d. How were the raw materials and finished products transported to and from each such location?
e. On an estimated daily basis, what was the amount of vermiculite (in weight or volume) stored at each such facility?
f. On a yearly average, how many employees worked at each such location?
g. Was vermiculite ore or product given to employees or the general public at any such location?
h. Did the state of Montana issue any permits (e.g. water or air) that were applicable to the operations at any such location?
i. Was vermiculate ore or product stored at any such location in a manner that permitted uncontrolled access to such product by employees or the general public?

Response Question 3:

Grace incorporates here by reference its General Objections and its Objections To The Instructions and Definitions. Grace also objects to Question 3 to the extent it purports to

incorporate the definition of "Facility" or "Site" contained in Definition No. 3. Grace further objects to Question 3 as vague, ambiguous, overly broad and unduly burdensome to the extent it seeks information regarding a facility "so identified." This term is neither defined nor adequately referenced and accordingly is subject to differing opinions as to its ordinary meaning. Grace further objects to the subpart of this Question 3 as follows:

Subpart b Grace objects to Subpart b as vague, ambiguous, overly broad and unduly burdensome to the extent that it requests information regarding "operation(s)" performed at "such location." These terms are neither defined nor adequately referenced and accordingly are subject to differing opinions as to their ordinary meaning.

Subpart c Grace objects to Subpart c as vague, ambiguous, overly broad and unduly burdensome to the extent that it requests information regarding "raw materials," "finished materials," at "each such location." These terms are neither defined nor adequately referenced and accordingly are subject to differing opinions as to their ordinary meanings.

Subpart d Grace objects to Subpart d as vague, ambiguous, overly broad and unduly burdensome to the extent that it requests information regarding "raw materials," "finished materials," at "each such location." These terms are neither defined nor adequately referenced and accordingly are subject to differing opinions as to their ordinary meanings.

Subpart e Grace objects to Subpart e as vague, ambiguous, overly broad and unduly burdensome to the extent that it requests information regarding "each such facility" and "storage." In particular, "storage" can include significant variance in terms of the time period referenced. These terms are neither defined nor adequately referenced and accordingly are subject to differing opinions as to its ordinary meaning. Grace further objects that the request is overly broad to the extent that the time period is undefined and may request information regarding persons or entities which are not within Grace's control.

Subpart f Grace objects to Subpart f as vague, ambiguous, overly broad and unduly burdensome to the extent that it requests information regarding "each such location." This term is neither defined nor adequately referenced and accordingly is subject to differing opinions as to its ordinary meaning. Grace also objects to this request as being is overly broad and unduly burdensome to the extent that it seeks information regarding "all employees."

Subpart g Grace objects to Subpart g as vague, ambiguous, overly broad and unduly burdensome to the extent that it requests information regarding "such location" and "vermiculite ore or product." These terms are neither defined nor adequately referenced and accordingly are subject to differing opinions as to their ordinary meanings.

Subpart h Grace objects to Subpart h as vague, ambiguous, overly broad and unduly burdensome to the extent that it requests information regarding "any such location" and "applicable to operations." These terms are neither defined nor adequately referenced and accordingly are subject to differing opinions as to their ordinary meanings. Grace also objects to this request to the extent that it may seek information regarding regulatory activity which is

outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Grace objects to this request as overly broad and unduly burdensome to the extent the information requested could be located and identified as easily by the U.S. Environmental Protection Agency ("EPA") as by Grace. Grace also objects to Question 3 to the extent that it requests confidential or proprietary business information and/or information protected under various trade secret and intellectual property laws.

Subpart i Grace objects to Subpart i as vague, ambiguous, overly broad and unduly burdensome to the extent that it requests information regarding "such location," "uncontrolled access," and "such product." These terms are neither defined nor adequately referenced and accordingly are subject to differing opinions as to their ordinary meanings.

Without waiving these objections, Grace responds as follows:

Response 3a-d:

Mine and Mill.

Vermiculite mining first began in Libby in approximately 1922, conducted by Mineral Carbon and Insulating Co., which changed its name to Zonolite Co. in 1923.

Grace first began mining vermiculite in Libby after it acquired the assets of the Zonolite company in 1963. Grace stopped mining vermiculite in Libby in September 1990.

The vermiculite was mined using open strip mining techniques. The vermiculite deposit was a massive biotite intrusive such that the vermiculite was mined as a continuous 100 foot thick layer covering the biotite core of the mountain. After overburden was removed, the areas of vermiculite were drilled and blasted, and the material was picked up and put in 85 ton open bed haul trucks. The trucks took the material to a transfer point where they dumped the material into a large hopper. There were steel bars on top of the hopper, which acted to separate any large rock out of the material. From the bottom of the hopper, the material went through a mechanical shaking screen. The vermiculite went through the screen and the waste rock was left on top.

The process of mining and separating the ore remained the same throughout the mine operations, but the equipment at the transfer point and elsewhere changed somewhat over time. Prior to 1974, the ore from the bottom of the hopper was sent to separate silos depending on grade and sizing, which were then combined via draw points at the bottom to produce a blended mill feed. Starting in 1974, the vermiculite ore that fell through the screen (less than 5/8" diameter) was transported on an open conveyor belt with a cover to the Ore Storage and Blending facility where a mechanical distributor piled the ore in layers to start the process of blending a uniform feed for the mill. While the ore was being stacked into a pile on one side of the dome, a reclaimer was removing ore from another pile by cutting the layers previously laid down. The reclaimed and blended ore was placed on an open conveyor belt with cover and carried to the mill surge bin.

The original dry mill was used from 1922 through 1974. A wet mill, which supplemented the dry mill, was completed by The Zonolite Company in 1954. Grace operated the dry and wet mills starting in April 1963. Grace replaced both mills in 1974 with a new wet mill, which was used until the facility ceased operations in 1990. The dry mill consisted of a series of screening operations which resulted in a concentrated vermiculite. Starting in 1954, the material went from the transfer point to the wet mill where it was sprayed with water and sent through screenings which removed some of the waste materials, and other processes that concentrated the ore. After it left the original wet mill, the concentrated ore went to the dry mill for further separation processes. Some of the methods of processing the vermiculite in the dry mill and 1954 wet mill changed over time, but the basic process remained the same from the time Grace purchased the facility through 1974.

After 1974, a new wet mill was constructed using a different technology. The ore containing approximately 20-25% vermiculite was fed to several wet vibrating screens and separated into different sizes. The larger sized particles, after being thoroughly washed, were separated into vermiculite concentrate and tailings. The fine ore was washed in several additional stages, screened, and separated from very fine particles and mud or slimes. The fine vermiculite was then separated from its gangue by froth flotation. All sizes of vermiculite were recombined, dewatered and dried on a fluid bed dryer. The concentrate, which was collected in a bin at the mill, was transported 1700 feet on a surface tramway to another bin installation near the bottom of the mountain. From there, the concentrate was hauled to the screening, storage, and shipping point on the Kootenai River.

Near the bottom of the ore skip was a metal covered building made of hand hewn wood timbers that had been used at some time as a vermiculite expanding location. Grace dismantled the building in the early 1980s.

The Superior Asbestos Company, a wholly-owned subsidiary of the Zonolite Company, installed a pilot plant in the mill building in early September 1962 to investigate the commercial uses, if any, for tremolite. No raw asbestos concentrate was ever sold although samples were sent to prospective purchasers through approximately December 1964.

Screen Facility

At the screening and storage area, the vermiculite concentrate was divided into four or five commercially sized fractions and stored in silos or a covered three-sided building. As orders were placed, the vermiculite concentrate was transferred by underground conveyor to the river and on a suspended conveyor belt over the Kootenai River where it was emptied into rail cars and shipped to various expanding plants. The screen facility was used by Grace from 1974 through 1990. Between 1963 and 1974, the concentrate was separated after coming out of the mill and transported down to the storage area in the various sized fractions and stored in silos and the shed.

Export Area

Grace operated the expanding plant at this location from April 1963 until closing the plant in approximately 1969. In the expanding plant, the vermiculite concentrate was heated in a furnace to cause the moisture in the vermiculite to turn to steam and exfoliate the vermiculite (like popping popcorn). There was also a bagging facility at the export area used by Grace from April 1963 and sporadically through 1990. In the 1980s, very little of the concentrate was bagged prior to export; rather, most vermiculite concentrate was shipped out in bulk from the screen facility. If a special order requested bagged concentrate, the concentrate was hauled from the screen facility to the bagging area in Libby where it was unloaded into an elevator and bagged in 15 to 20 pound bags. During the 1980s, the research department conducted experiments with different vermiculite concentrate products.

Louisiana and 3rd

Grace did not use the property at this area for any processing or storing of vermiculite. This property was owned by Grace but used as a ball field.

Office Lease

To Grace's knowledge, this property was never used in association with any vermiculite or vermiculite products. Rather, this property was used for office personnel and purposes only.

BN Railroad Lease

To Grace's knowledge, this property was never used in association with any vermiculite or vermiculite products. Rather, this property was used by Grace solely for the purposes of fuel storage. At his time, Grace cannot specify the specific dates this property was leased and/or used for fuel storage. *ARS, EM*

Question 3e:

On an estimated daily basis, what was the amount of vermiculite (in weight or volume) stored at each such facility?

Response 3e:

Grace cannot accurately estimate the daily storage of vermiculite at each location from 1963 to 1990.

At the mine and mill, ore was in process at all times with vermiculite concentrate being processed on a daily basis. In the Ore Storage and Blending Building, the vermiculite ore was constantly being stacked and removed. The amount of vermiculite ore that passed through the milling process varied both on a daily basis and over the years of operation and depended on several factors including but not limited to the amount of ore mined on a given day, the

percentage of vermiculite in that portion of the ore body, the rate of recovery of vermiculite in the mill, the demand for vermiculite concentrate in the market, and the amount of vermiculite concentrate at the screen facility. The average daily production from the mine and milling operation was between 800 and 1000 tons of finished vermiculite concentrate in the 1980s and was between 500 and 1000 tons of finished vermiculite concentrate per day between the late 1960s and 1970s. *ARS*

At the screen facility, Grace stored vermiculite concentrate in silos or the storage shed. In the 1980s, a maximum of 40,000 tons of vermiculite concentrate was stored on a daily basis that ebbed and flowed as orders were placed and filled.

At certain times, Grace stored smaller quantities of vermiculite concentrate and sometimes expanded vermiculite at the Export Area. Storage of expanded vermiculite associated with the expanding plant probably occurred; however, Grace cannot specify how much expanded vermiculite was stored or where.

Grace is not aware of storage of any vermiculite ore or concentrate at the ballfield at Louisiana and 3rd or at the BN Railroad lease property.

Question 3f:

On a yearly average, how many employees worked at each such location?

Response 3f:

Grace cannot state a yearly average of employees at any particular location in or around Libby. Rather, Grace employed people in a variety of changing positions with very few people assigned to only the mine or the mill; most people worked in some ancillary service area such as quality control, research, administrative, mobile equipment repair, warehousing, or maintenance. By the 1980s, however, no Grace employees were stationed in town.

In the aggregate, Grace employment in Libby was at a maximum of about 200 in the late 1970s, stabilized at about 120 people through 1983, and then reduced to approximately 80 people from 1984 through closure of the mine. *ARS*

Question 3g:

Was vermiculite ore or product given to employees or the general public at any such location?

Response 3g:

Yes. Vermiculite concentrate was available for employees to take home for use in their gardens. Expanded vermiculite was available for employees to take home for personal use. Employees were required to obtain permission from their supervisors to remove vermiculite

concentrate or expanded vermiculite. Grace did not provide vermiculite to the general public, though throughout the 1970s, Grace donated vermiculite mill coarse tailings for use on the Libby High School running track (Grace paid for installation of a rubberized asphaltic running surface in approximately 1981). *ARS, EM*

Question 3h:

Did the State of Montana issue any permits (e.g. water or air) that were applicable to the operations at any such location?

Response 3h:

Yes. In particular, the State of Montana issued several permits to the facilities. Grace had a mining permit and an air quality permit. The mine had no water discharge permit because no water was discharged; it was a closed loop system. Grace had a hazardous waste generator identification number in later years as required by state law because it generated used solvents from the maintenance facilities. Grace had underground storage tank permits from the state as required for storage of petroleum (gasoline and diesel). *ARS*

Question 3i:

Was vermiculite ore or product stored at any such location in a manner that permitted uncontrolled access to such product by employees or the general public?

Response 3i:

The Grace mine and mill property and screen facility were isolated and security was present at the main gates to prevent unauthorized entry. Grace had fences and locked gates during time periods when the facility was not in operation. No unauthorized person could drive onto the properties although pedestrian access was not enforced. The export area was fenced to discourage unauthorized entry. Employees had to request permission from their supervisors to remove vermiculite concentrate or expanded vermiculite. Although Grace had fences and security to prevent unauthorized entry onto the premises, members of the public sometimes entered the properties. *ARS*

Question 4:

Describe the dust control measures or equipment used at each such location, including, but not limited to the year of installation, the method of dust control used and reason why such control measures or equipment were installed. That is, was any such action caused by a directive or order from any regulatory agency of the State of Montana?

Response Question 4:

Grace incorporates here by reference its General Objections and its Objections To The Instructions and Definitions. Grace further objects to Question 4 as vague, ambiguous, overly broad and unduly burdensome to the extent that it requests information regarding "such location," "dust control," and "directive or order." These terms are not defined and are subject to differing opinions as to their ordinary meaning. Grace also objects to Question 4 to the extent that it seeks information outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Without waiving these objections, Grace responds as follows:

Some of the measures taken by Grace or its predecessor mentioned may have been implemented in response to or in cooperation with recommendations from Benjamin F. Wake, an industrial hygienist with the Montana State Board of Health. However, regardless of government requirements, Grace had a policy of minimizing excess dust at the Libby facility. Grace implemented or continued a vast array of dust control measures at the Libby facilities over the years of operation.

Specifically, within the first year of purchasing the facility, Grace added the following: At the mine, Grace used a controlled quantity of water or diesel fuel to control dust during drilling.

At the dry mill, Grace added a bigger exhaust fan on January 20, 1964. All operating units were connected to the ventilation systems and all belt discharges were hooded and connected. All chutes were covered. Grace also added a new cyclone in 1965. After purchasing the facility, Grace instituted a program of repair and maintenance on all air ducts, chutes and casings. Grace required use of respirators in the dry mill. Grace added a monthly sweepdown of the mill to remove dust from rafters, purlins, gutter boxes and sills. Grace acquired dust count apparatus and trained personnel to measure dust concentrations within the dry mill. Within the first year, Grace began research to replace the dustiest portions of the dry mill with wet processes such as the roll crusher installations.

Grace relied on natural ventilation in the skip car loading and unloading processes, but provided respirators for employee use at the Kenworth truck loading area.

At the screen facility, Grace supplied respirators to operators of the loader-dozer. The load-out gates were equipped with hoods, duct system, and fan in 1956, prior to Grace's tenure at the facility. Also prior to Grace's involvement, the silo storage bins at the screen facility were equipped with a ventilation system (included the load-in elevator, load-out gates, belt discharge, load-out elevator, and discharge onto the river belt). In 1962 a system to control and remove dust from the vermiculite concentrate consisting of fan, cyclone and dust holding bin was installed at the discharge terminal of the river belt. Respirators were furnished at the load-out to address any additional dust issues.

The bagging equipment at the export area was ventilated. Any other employee that had reason to come in contact with quantities of dust was required to wear a respirator for the duration of the exposure.

Not long after purchasing the Libby operation, Grace became concerned with its ability to control dust in the dry mill and began investigating and researching the options for switching the milling to a completely wet process. It took Grace several years to fully engineer, test, and construct the new wet mill, but in 1974, the new wet mill opened, completely replacing the former dry mill and wet mill combination. At the new wet mill, as the wet concentrate was being dried, the exhaust air passed through a dust collection system.

At the screening facility, all screening was done with dust collection equipment installed and functioning. At the load out facility, all loading was done with a dust collection system installed and functioning.

Grace also added a variety of bag houses over the years (see Response 13, below) and did extensive research to develop a bonding agent to adhere the dust to the vermiculite concentrate. Starting in 1983, Grace applied soybean oil to the vermiculite concentrate to hold any dust particles to the vermiculite.

Grace employed a number of methods to control fugitive road dusts including use of No. 5 oil on the driving surfaces at the mine, water trucks, special dust suppressant, and road sealers. Also, Grace employed air conditioned and filtered cabs in all its mining equipment starting in the late 1970s. *ARS, EM*

Question 5:

Did WRG have a medical surveillance program for each such location? If so when was it started and what was the purpose of such program? In addition to the so-called "Alpha List", what identifiers did WRG give to any other records of the medical condition of employees?

Response Question 5

Grace incorporates here by reference its General Objections and its Objections To The Instructions and Definitions. Grace further objects to Question 5 as vague, ambiguous, overly broad and unduly burdensome to the extent that it requests information regarding "such location," a "medical surveillance program," and an "Alpha list." These terms are not defined and are subject to differing opinions as to their ordinary meaning. Grace further objects to Question 5 to the extent it requests disclosure of information subject to Montana's constitutionally protected right to privacy or seeks information outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Without waiving these objections, Grace responds as follows:

Grace maintained a medical surveillance program and complied with all applicable governmental regulations regarding the monitoring of its employees' health. Since 1956, Grace and its predecessor, required pre-employment physical examinations at Libby. A medical

surveillance program had been evolving since 1959 when X-ray testing of employees at Libby was conducted. In 1964 and annually thereafter, another set of X-rays was done on Libby employees and periodic X-ray testing was begun at that time, the results of which were made available to the personal physician of each employee for interpretation, with instructions to the employee to contact his physician to discuss the results. The X-ray tests were performed and evaluated by independent physicians selected by personnel at the Libby facility.

Beginning in the early 1970s, Grace management met with employees individually to discuss their X-ray test results and to recommend further evaluation from a personal physician. Pulmonary function tests were added in 1974. Spirometry tests were performed on Libby employees in 1964 and were conducted periodically after 1975. In 1977, Grace commissioned a chest X-ray evaluation program to determine the nature of lung problems of Grace's employees at the mining and milling operations in Libby. Since 1978, Grace required its Libby employees to complete a health status questionnaire. Since the mid-1970s, Grace required that all new employees be non-smokers.

Grace is unaware of any "identifiers" for its employee medical records.

Grace incorporates here by reference its response to Question 20.

Question 6:

When did WRG first find Tremolite in the vermiculite ore? Thereafter, did WRG regularly sample the vermiculite ore to determine the percentage of tremolite? What was a representative percentage of tremolite in the vermiculite ore?

Response Question 6:

Grace incorporates here by reference its General Objections and its Objections To The Instructions and Definitions. Grace further objects to Question 6 as vague, ambiguous, overly broad and unduly burdensome to the extent that it requests information regarding "vermiculite ore" and a "representative percentage." These terms are not defined and are subject to differing opinions as to their ordinary meaning. Grace further objects to Question 6 because this request is not limited by location or time period and is outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Without waiving these objections, Grace responds as follows:

Grace was aware of the presence of tremolite in the vermiculite ore deposits when it purchased the company in 1963. Grace determined the amount of vermiculite present in the ore and was generally if not specifically aware of the content of tremolite in both the deposits and the ore. The amount of tremolite varied as different geologic concentrations of vermiculite ore were mined. On average, after the vermiculite ore was milled and concentrated, the amount of tremolite in the concentrate was 1% or less. After the concentrate was expanded or exfoliated, if any tremolite remained, it was only a trace amount.

Grace had drill hole data that specified where the concentrations of vermiculite were and the various grades; it also identified how much tremolite was in each hole as well as other non-vermiculite materials. Grace had a policy of not processing vermiculite containing higher concentrations of tremolite – those portions of the mine went directly to waste piles rather than through the mill.

Grace incorporates here by reference its response to Question 8.

Question 7:

Has WRG determined that tremolite caused asbestosis? When did WRG first tell the employees of this health hazard?

Response Question 7:

Grace incorporates here by reference its General Objections and its Objections To The Instructions and Definitions. Grace further objects to Question 7 as vague, ambiguous, overbroad and unduly burdensome to the extent that it requests information regarding the term "health hazard." The term "health hazard" is not defined and is subject to differing opinions as to its ordinary meaning. Grace objects to Question 7 to the extent that it seeks legal or medical opinions regarding "causation" and "asbestosis." Grace also objects to Question 7 because it seeks information outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Without waiving these objections, Grace responds as follows:

Grace has determined that asbestiform tremolite may cause asbestosis under certain conditions, including substantial dose and duration.

Grace cannot identify the precise date or manner in which one or more of its employees might have become aware of alleged health hazards associated with the inhalation of asbestos fibers by human beings. However, through established Health and Safety Committees, Grace employees met periodically to discuss health, safety and asbestos issues. Grace has no documented information regarding specific topics discussed at these meetings. Additionally, union records reflect the existence of a dust committee specifically tasked with addressing dust issues at the Libby facilities and knowledge on the part of the union in approximately 1962 or 1963 regarding health hazards associated with the dust.

Beginning in 1972, Grace placed government required signs in the mine with the following warning:

ASBESTOS
DUST HAZARD
Avoid Breathing Dust.
Wear Assigned Protective Equipment.
Do Not Remain In Area Unless Your Work Requires It.
Breathing Asbestos Dust May Be Hazardous To Your Health.

In 1979, Grace published a brochure, distributed to its employees in Libby, which dealt with the subject of asbestos and health. Also, in 1979, as part of regular employee training and educational meetings, Grace instituted a slide show and question-and-answer session. As with the employee brochure, that slide show included references to asbestos and health. In 1983 or 1984, Grace and an outside consultant developed a tape and slide show presentation entitled "Picture Perfect" which was shown annually to Libby employees and included references to, among others, lung cancer and mesothelioma. Grace has complied with all applicable governmental regulations regarding notifying its employees of potential job hazards, including asbestos exposure.

Grace incorporates here by reference its response to Question 5.

Question 8:

Can tremolite be separated from vermiculite ore? If so, did WRG ever attempt to make such separation prior to the sale of its product?

Response Question 8

Grace incorporates here by reference its General Objections and its Objections To The Instructions and Definitions. Grace further objects to Question 8 as vague, ambiguous, overbroad and unduly burdensome to the extent that it requests information regarding "its product," "vermiculite ore" and "separated." These terms are not defined and are subject to differing opinions as to their ordinary meaning. Grace also objects to Question 8 to the extent that it seeks information regarding the "sale of its product", without any limitation as to time period or location, as being outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Without waiving these objections, Grace responds as follows:

Most, but not all tremolite can be removed from vermiculite ore. Grace attempted to remove as much tremolite as possible from the vermiculite ore in the milling process. As a matter of practice, Grace did not process ore with higher concentrations of tremolite.

By 1983, Grace was tracking tremolite removal. Grace was constantly striving to improve removal of tremolite from the ore concentrate. For instance, in 1983, Grace was removing on average 98.3% of the tremolite in the ore (reducing the amount of tremolite in the vermiculite concentrate to approximately 0.51%). By 1987, Grace was removing 99.6% of the tremolite from the ore resulting in vermiculite concentrate with 0.19% tremolite.

Grace incorporates here by reference its response to Question 6. *ARS*

Question 9:

Provide a listing of WRG controlled (i.e. subsidiary, partner, joint venturer) companies that purchased raw (i.e. product that had not undergone exfoliation treatment) vermiculite ore from WRG that was produced at the Libby, Montana mine.

Response Question 9

Grace incorporates here by reference its General Objections and its Objections To The Instructions and Definitions. Grace further objects to Question 9 as vague, ambiguous, overbroad and unduly burdensome to the extent that it requests information regarding "product", "purchased" "vermiculite ore," "exfoliation treatment" and the "Libby, Montana mine". These terms are not defined and are subject to differing opinions as to their ordinary meaning. Without waiving these objections, Grace responds as follows:

Grace did not sell "raw vermiculite ore" to anyone. Grace owned certain vermiculite expanding plants around the United States that likely received vermiculite concentrate from the Libby mine including, but potentially not limited to, the following:

Albany, N.Y.
Atlanta, Georgia
Birmingham, Alabama
Boca Raton, Florida
Chicago, Illinois
Dallas, Texas
Dearborn, Michigan
Denver, Colorado
Detroit, Michigan
Easthampton, Mass.
Ellwood City, Penn.
High Point, N. Carolina
Irondale, Alabama
Jacksonville, Florida
Kansas City, Missouri
Kenilworth, Maryland
Libby, Montana
Los Angeles, Calif.
Milwaukee, Wisconsin
Minneapolis, Minnesota
Muirkirk, Maryland
Nashville, Tennessee
Newark, California
New Castle, Pennsylvania
New Orleans, Louisiana
North Billerica, Mass.
North Little Rock, Ark.
Oklahoma City, Oklahoma
Omaha, Nebraska
Phoenix, Arizona
Pompano Beach, Florida
Portland, Oregon
Sacramento, Calif.
San Antonio, Texas
Santa Ana, California
Savannah, Georgia
Sharpsburg, Penn.
South Omaha, Nebraska
St. Louis, Missouri
Tampa, Florida
Travelers Rest, S. Carolina
Trenton, New Jersey
Utica, New York
Weedsport, N. Y.
West Chicago, Illinois
West Glendale, Illinois
Wilder, Kentucky

Ari-Zonolite Co.
Calif. Zonolite Co. - L.A.
Calif. Zonolite Co. - Newark
Calif. Zonolite Co. - Santa Ana

Texas Verm. Co.-Dallas
Texas Verm. Co.-San Antonio
Verm. - N.W. Portland
Verm. - N.W. Spokane
Western Mineral Products

Question 10:

Provide a listing of non-WRG controlled companies that purchased raw vermiculite ore from WRG that was produced at the Libby, Montana mine.

Response Question 10

Grace incorporates here by reference its General Objections and its Definitional Objections. Grace further objects to Question 10 as vague, ambiguous, overly broad and unduly burdensome to the extent it requests information regarding "non-WRG controlled companies" "purchased" "vermiculite ore" and the "Libby, Montana mine". These terms are also not defined and are subject to differing opinions as to its ordinary meaning. Grace also objects to Question 10 to the extent that it requests confidential or proprietary business information and/or information protected under various trade secret and intellectual property laws. Without waiving these objections, Grace responds as follows:

Grace did not sell "raw vermiculite ore" to anyone. Grace sold vermiculite concentrate to a variety of business entities, including several companies with licenses from Grace, and including but potentially not limited to the following domestic customers: See Attachment A.

Question 11:

Provide a listing of WRG controlled companies that purchased exfoliated vermiculite from WRG that was produced at the Libby, Montana mine.

Response Question 11:

Grace incorporates here by reference its General Objections and its Definitional Objections. Grace further objects to Question 11 as vague, ambiguous, overly broad and unduly burdensome to the extent it requests information regarding "WRG controlled companies," "purchased," "exfoliated vermiculite," and the "Libby, Montana mine". These terms are also not defined and are subject to differing opinions as to its ordinary meaning. Grace also objects to Question 11 to the extent that it seeks information regarding any purchase of exfoliated vermiculite, without any limitation as to time period or product resale, as being outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Grace also objects to Question 11 to the extent that it requests confidential or proprietary business information and/or information protected under various trade secret and intellectual property laws.

Grace objects to Question 11 as overbroad and unduly burdensome because it requests information which does not currently exist in any reasonable subset of documents and, in fact, would require the review of over one million pages in order to extrapolate the necessary information. Moreover, all such documents are being made available to EPA not later than March 6, 2000.

Question 12:

Provide a listing of non-WRG controlled companies that purchased exfoliated vermiculite from WRG that was produced at the Libby, Montana mine.

Response Question 12:

Grace incorporates here by reference its General Objections and its Definitional Objections. Grace further objects to Question 12 as vague, ambiguous, overly broad and unduly burdensome to the extent it requests information regarding "product", "purchased, " "non-WRG controlled companies," "vermiculite ore," "exfoliation treatment" and the "Libby, Montana mine". These terms are also not defined and are subject to differing opinions as to their ordinary meaning. Grace also objects to Question 12 to the extent that it seeks information regarding any purchase of exfoliated vermiculite, without any limitation as to time period or product resale, as being outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Grace also objects to Question 12 to the extent that it requests confidential or proprietary business information and/or information protected under various trade secret and intellectual property laws.

Grace objects to Question 12 as overbroad and unduly burdensome because it requests information which does not currently exist in any reasonable subset of documents and, in fact, would require the review of over one million pages in order to extrapolate the necessary information. Moreover, all such documents are being made available to EPA not later than March 6, 2000.

Question 13:

What controls existed (e.g. bag houses or scrubbers) on dust particles in the steam exhaust from the mine or any exfoliation facility?

Response Question 13

Grace incorporates here by reference its General Objections and its Definitional Objections. Grace further objects to Question 13 as vague, ambiguous, overly broad and unduly burdensome to the extent it requests information regarding "dust particles," "steam exhaust," "mine," "any exfoliation facility." These terms are also not defined and are subject to differing opinions as to its ordinary meaning. Grace also objects to Question 13 to the extent that it seeks information regarding any exfoliation facility, without any limitation as to time period or location, as being outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Without waiving these objections, Grace responds as follows:

Grace assumes that the question asks what particulate matter emission control devices or means existed at any part of the Libby facility. Grace had baghouses at the following locations at the Libby facility: dryer (mill), product belt (mill), skip (surface tramway), 350 ton truck dump (at screen plant), screen plant, 2 units at inventory storage (screen plant), 12th level, export (bagging facility in town), and river loading (across Kootenai from screen plant).

Grace incorporates here by reference its response to Question 4. *ARS*

Question 14:

What types of waste products or waste materials were produced at each such location and describe what was done with each such waste stream to dispose of such materials?

Response Question 14

Grace incorporates here by reference its General Objections and its Definitional Objections. Grace further objects to Question 14 as vague, ambiguous, overly broad and unduly burdensome to the extent it requests information regarding "waste products," "waste materials, " "each such location," "waste stream," "dispose" and "such materials." These terms are also not defined and are subject to differing opinions as to their ordinary meaning. Grace also objects to Question 14 to the extent that it seeks information regarding "each such location," without any limitation as to time period or location, as being outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Without waiving these objections, Grace responds as follows:

At the mine, non-vermiculite material was hauled to a waste dump on site. The larger sized material was separated at the hopper and hauled to the same waste dump on site. Mill tailings were transferred to either a coarse tailing pile or a slimes impoundment on site. *ARS*

Question 15:

Did WRG decide in the vermiculite production process to differentiate between ore bodies containing greater amounts of tremolite and those containing less tremolite?

Response Question 15:

Grace incorporates here by reference its General Objections and its Definitional Objections. Grace further objects to Question 15 as vague, ambiguous, overly broad and unduly burdensome to the extent it requests information regarding "production process," "differentiate" and "ore bodies." These terms are also not defined and are subject to differing opinions as to their ordinary meaning. Grace also objects to Question 15 to the extent that it seeks information regarding any "vermiculite production process," without any limitation as to time period or location, as being outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Without waiving these objections, Grace responds as follows:

Yes. Grace had a complete drill hole database of the mining area. This database allowed the mine planning department to identify areas of high tremolite concentrations. These areas, irrespective of the amount of vermiculite in them, were classified as waste and hauled to a mine waste dump. The amount of tremolite in the mill feed material was held to as low a percentage as possible.

Grace incorporates here by reference its response to Question 6. *EM, ARS*

Question 16:

Did WRG check its vermiculite ore for the presence of tremolite? If tremolite was found to be present, did WRG sell such ore in the same manner as if no tremolite was present?

Response Question 16:

Grace incorporates here by reference its General Objections and its Definitional Objections. Grace further objects to Question 16 as vague, ambiguous, overly broad and unduly burdensome to the extent it requests information regarding "vermiculite ore," "presence," "check" and "same manner." These terms are also not defined and are subject to differing opinions as to its ordinary meaning. Grace also objects to Question 16 to the extent that it seeks information regarding any "vermiculite ore," without any limitation as to time period or location, as being outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Without waiving these objections, Grace responds as follows:

Yes, Grace checked its vermiculite ore for the presence of tremolite, although the techniques were somewhat limited in the earlier years. Ore was checked for tremolite visually in the mine and sorted to either the transfer point or the waste dumps. Grace also checked the vermiculite concentrate for the presence of tremolite. From 1983, Grace was able to determine accurately quantitatively the amount of tremolite in the concentrate shipped from the Libby operations. The amount of tremolite in the concentrate was reduced from 0.5% by weight in 1983 to less than 0.1% by weight in 1990. Grace incorporates here by reference its responses to Questions 6, 8, and 15. *ARS, EM*

Grace sold vermiculite concentrate from the Libby mine with special warning labels. Grace placed the following warning labels on bags of vermiculite concentrate from Libby starting in March 1976:

CAUTION
CONTAINS ASBESTOS FIBERS
BREATHING ASBESTOS DUST MAY CAUSE
SERIOUS BODILY HARM

Warning placards were first placed on covered hopper cars carrying vermiculite concentrate shipments from Libby in September 1977:

CAUTION
PRODUCT CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
BREATHING ASBESTOS DUST MAY
CAUSE BODILY HARM
IMPORTANT
THIS NOTICE TO BE REMOVED UPON
UNLOADING CAR CONTENTS
VERMICULITE CONCENTRATE
DATE _____ W.R. GRACE & CO., LIBBY, MT

Beginning in approximately 1974, Grace supplied Material Safety Data Sheets to its customers.

Question 17:

Did WRG know that employees regularly left the mine or other WRG facilities with vermiculite/tremolite dust from the various operations on their clothes?

Response Question 17

Grace incorporates here by reference its General Objections and its Definitional Objections. Grace further objects to Question 17 as vague, ambiguous, overly broad and unduly burdensome to the extent it requests information regarding "regularly," "vermiculite/tremolite dust, " "the mine," "WRG facilities," and "various operations." These terms are also not defined and are subject to differing opinions as to their ordinary meaning. Grace also objects to Question 17 to the extent that it seeks information regarding "WRG facilities" or "various operations," without any limitation as to time period or location, as being outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Without waiving these objections, Grace states as follows:

No. Grace employees did not "regularly" leave the mine with vermiculite/tremolite dust on their clothes. Air blowers, and later vacuum systems, were available to employees to remove dust from clothes prior to leaving the mine area. Company issue coveralls and on-site laundry services have been provided to the mechanics since Grace began operating the mine in 1963. The 1979 brochure given to all Libby employees advised the employees to clean their clothing and remove dust before leaving work to avoid taking any of the dust into their homes. Since the mid-1980's, Grace required Libby employees to wear a uniform at work and change clothes before leaving the facility.

Question 18:

What actions were taken by WRG to prevent the transport of such dust material to the homes of employees?

Response Question 18

Grace incorporates here by reference its General Objections and its Definitional Objections. Grace further objects to Question 18 as vague, ambiguous, overly broad and unduly burdensome to the extent it requests information regarding "such dust material" and "homes of employees." These terms are also not defined and are subject to differing opinions as to their ordinary meaning. Grace also objects to Question 18 to the extent that it seeks information, without any limitation as to time period or location, as being outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Without waiving these objections, Grace states as follows:

Grace incorporates here by reference its response to Question 4, 7 and 17. Additionally, Grace consistently treated the roadway to the mine with various materials in an effort to minimize the dust which at times may be created by vehicular traffic.

Question 19:

Did WRG ever operate or participate with a regulatory agency in any air sampling programs or studies?

Response Question 19:

Grace incorporates here by reference its General Objections and its Definitional Objections. Grace further objects to Question 19 as vague, ambiguous, overly broad and unduly burdensome to the extent it requests information regarding "operate or participate." This term is also not defined and is subject to differing opinions as to its ordinary meaning. Grace also objects to Question 17 to the extent that it seeks information regarding any "any programs or studies," without any limitation as to time period or location, as being outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Without waiving these objections, Grace responds as follows:

Yes. In approximately 1965, air sampling as part of general health and safety reviews was performed by Grace personnel at the Libby mine and mill. Starting in the late 1960s, Grace and the Montana Public Health Department cooperated in joint air sampling efforts, comparing test results to ensure accurate measurements. Since approximately 1969, periodic dust studies as part of general health and safety reviews have been performed by Grace personnel on a routine basis. There have been a number of dust studies that were not performed by Grace. The first report of a study by an organization which mentions dust of any type or air quality was written by the Montana State Board of Health regarding its inspection of the Libby plant on December 9, 1941. There have been a number of studies in the Libby facilities which mention asbestos dust. For example, in 1956, 1959, and several times in the 1960s, the Montana Public Health Department inspected and reported on the Libby mine and mills, then owned and operated by the Zonolite Company, and in October 1968, the U.S. Department of Health, Education and Welfare reported on its air sampling at Libby.

Question 20:

Did WRG conduct or participate with any regulatory agency or academic institution in a mortality study involving its Libby, Montana employees?

Response Question 20:

Grace incorporates here by reference its General Objections and its Definitional Objections. Grace further objects to Question 20 as vague, ambiguous, overly broad and unduly burdensome to the extent it requests information regarding "mortality studies" and "Libby, Montana employees." These terms are also not defined and are subject to differing opinions as to their ordinary meaning. Grace also objects to Question 20 Grace to the extent it seeks information subject to Montana's constitutionally protected right to privacy. Without waiving these objections, Grace responds as follows:

Yes. The following studies, both mortality and other, were conducted on Grace employees in Libby, Montana:

William S. Spicer, Jr., M.D., Head, Division for Pulmonary Diseases, University of Maryland, School of Medicine, Baltimore, Maryland, conducted a review of spirometry tests and chest X-rays of Grace employees in Libby, Montana. The results of the study, entitled "Asbestosis Study", are attached to a letter dated January 27, 1965 from Dr. Spicer to Dr. Robert Chenowith, Medical Director, Maryland Casualty Company, Baltimore, Maryland.

In 1977, Grace commissioned a chest X-ray evaluation program to determine the nature of lung problems of Grace's employees at the mining and milling operations in Libby, Montana. The study was completed under the auspices of Enbionics, and reported by Daniel T. Teitelbaum, M.D., to Grace on August 25, 1978.

Richard R. Monson, M.D., Sc.D., of the Harvard School of Public Health, Boston, Massachusetts, conducted a mortality study of Libby employees in 1982.

J. Corbett McDonald, M.D., of McGill University, Montreal, Canada, began an epidemiological study in 1983 of the mortality and radiological changes in miners exposed to tremolite asbestos in the vermiculite mined and milled at Grace's Libby, Montana vermiculite mine. The findings of the study were presented at the Sixth International Symposium on Inhaled Particles, sponsored by the British Occupational Hygiene Society, at Cambridge University in England on September 4, 1985. This study was published in the British Journal of Industrial Medicine in 1986.

Harland Amandus, Ph.D., conducted a study of morbidity and mortality of workers who were employed at vermiculite mines and mills near Libby, Montana, for the Division of Respiratory Disease Studies of the National Institute for Occupational Safety and Health. The results of the study are discussed by Dr. Amandus in the report entitled "The Morbidity and Mortality of Vermiculite Miners and Millers Exposed to Tremolite-Actinolite." This report is

dated December 25, 1986, and was received by personnel employed by Grace Construction Products Division.

Question 21:

Did WRG conduct sampling of any environmental media to determine if hazardous substances were released from each such location? If so, describe such study with respect to the scope of the study and the desired information to be obtained.

Response Question 21:

Grace incorporates here by reference its General Objections and its Definitional Objections. Grace further objects to Question 21 as vague, ambiguous, overly broad and unduly burdensome to the extent it requests information regarding sampling of "any environmental media" and "such location." These terms are also not defined and are subject to differing opinions as to their ordinary meaning. Grace also objects to Question 21 to the extent that it seeks information regarding any "such location," without any limitation as to time period or location, as being outside the purview of EPA's authority under 42 U.S.C. § 9604(e). Without waiving these objections, Grace responds as follows:

When Grace ceased operations at the facility in 1990 it conducted a thorough environmental media investigation and closed the mine, mill, and other operations in accord with Montana mining and environmental laws. As part of the closure, Grace disposed of PCB-containing transformers, abated underground storage tanks and some associated contaminated soils, and found and abated contaminated soils associated with some underground plumbing works at the export area. Prior to closure, Grace abated and disposed of PCB-contaminated concrete. Also not associated with the closure, the BN railroad leased property was found to contain contaminants not associated with the time period Grace leased the property; the contaminated soils were excavated, incinerated, and returned in compliance with state environmental laws.

Grace incorporates here by reference its response to Question 19.

CERTIFICATION

I, David M. Cleary, hereby certify:

1. I am the person authorized by W. R. Grace & Co.-Conn., to respond to the Environmental Protection Agency's (EPA's) request for information concerning the Libby Asbestos Site in Libby, Montana.

2. Though counsel, I have made a reasonable review of documents and information relevant to the request.

3. I hereby certify that the attached response to EPA's request is complete to the best of my knowledge.

David M. Cleary
Senior Environmental Counsel
W. R. Grace & Co.

CONFIDENTIAL

ATTACHMENT A

(b) (4) [redacted]

(b) (4) [redacted]

CONFIDENTIAL

CONFIDENTIAL

(b) (4) [redacted]

(b) (4) [redacted]

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