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 FACIL: 50-387 Susquehanna Steam Electric Station, Unit 1, Pennsylv      05000387  
 AUTH. NAME      AUTHOR AFFILIATION  
 SAXTON, C. H.      Pennsylvania Power & Light Co.  
 RECIP. NAME      RECIPIENT AFFILIATION  
                          Pennsylvania, Commonwealth of

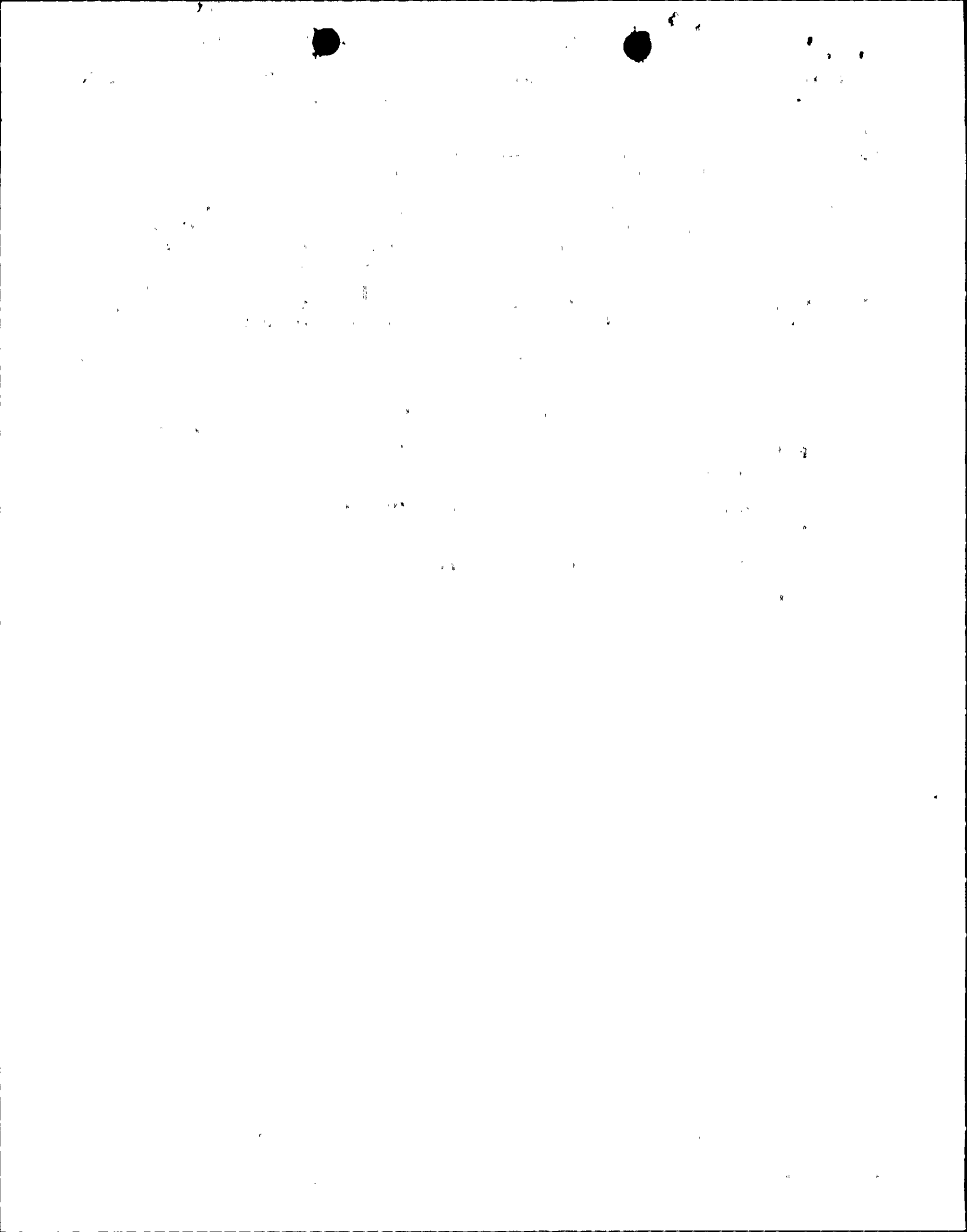
SUBJECT: NPDES noncompliance notification: forwards analysis of sand blasting grit disposed of on west laydown area Solid Waste Disposal Site 3. Results of EP toxicity analysis indicate that disposal at solid waste site should not cause harm.

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**Pennsylvania Power & Light Company**

Two North Ninth Street • Allentown, PA 18101 • 215 / 770-5151

October 27, 1987

Mr. William McDonnell  
Chief, Operation Section  
Bureau of Solid Waste Management  
Pennsylvania Department of Environmental Resources  
90 East Union Street, 2nd Floor  
Wilkes-Barre, PA 18701-3296

SUSQUEHANNA STEAM ELECTRIC STATION  
SOLID WASTE DISPOSAL PERMIT NO. 101363  
DISPOSAL OF SAND BLASTING GRIT  
CCN 741326 FILE R9-8C  
PLE- 9912

Dear Mr. McDonnell:

As per a telephone conversation with Mr. Chris Fritz of your office on October 16, 1987, attached please find analysis of sand blasting grit disposed of on the west laydown area (Solid Waste Disposal Site #3). Pennsylvania Power & Light Company requests approval for disposal of this material at the construction and demolition waste site authorized by Solid Waste Permit No. 101363.

The sand blasting waste, generated during recent heat exchanger cleaning activities, consists of two types of blasting grit described in the attached material safety data sheets. It is expected that a small quantity of this material will be generated during future heat exchanger maintenance. Results of EP toxicity analysis indicate that disposal of this material at Solid Waste Disposal Site #3 should not cause an environmental concern. Please inform our office of the results of your review so appropriate action can be expedited.

If you have any questions, please call me at (215) 770-7891.

Respectfully yours,

*Curtis H. Saxton /SRH*

Curtis H. Saxton  
Environmental Specialist-Nuclear

chs/ltj1152c:cly

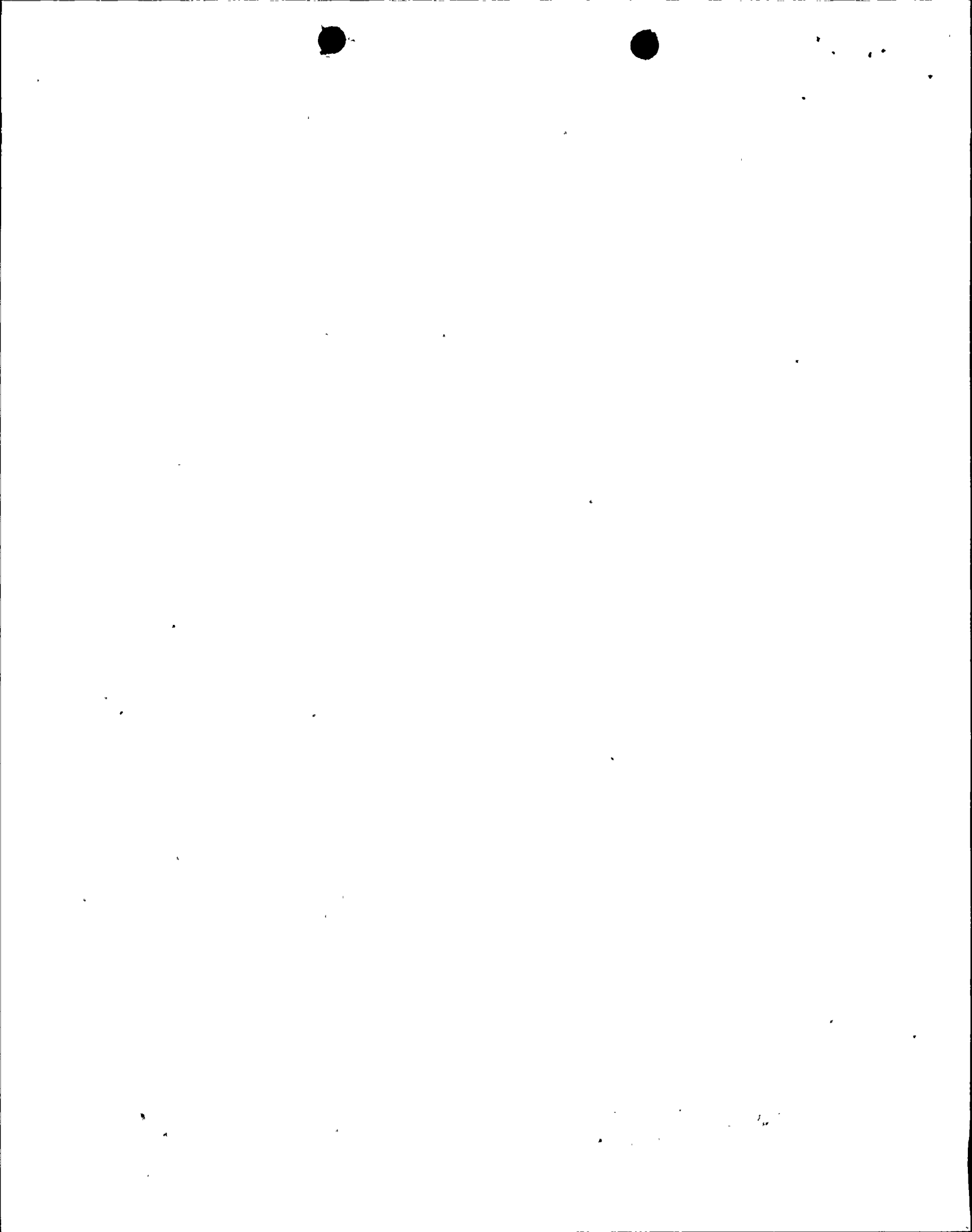
Attachment

Copy to:

Dr. W. R. Butler      US NRC

8710300102 871027  
PDR ADOCK 05000387  
PDR

*Cool*  
*1/1*



MATERIAL SAFETY DATA SHEET

1. MATERIAL IDENTIFICATION

Manufacturer's Name: MDC Industries, Inc.

Address: Collins & Willard Sts.  
Philadelphia, PA 19134

Telephone Number: (215) 426-5925

Material Name or Product Number: MDC Aluminum Oxide  
Economy Grade 150C

II. HAZARDOUS INGREDIENTS

<u>Chemical Name</u>	<u>CAS No</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
+Aluminum Oxide	7429-90-5	none established*	10 mg/m3 as aluminum
The following chemicals may be present in levels above 1% for this product:			
Ilmenite	12168-52-4	none established*	none established
Kyanite	1302-76-7	none established*	none established
Leucosene	12173-81-8	none established*	none established
++Quartz	14808-60-7	++	0.1 mg/m3
Staurolite	12182-56-8	none established*	none established
Zircon	14940-68-2	none established*	5 mg/m3 STEL=10. mg/m3

\*The OSHA Permissible Exposure Limit (PEL) for Total or Nuisance (Inert) dust is 15 mg/m3.

The American Conference of Governmental Industrial Hygienists Threshold Limit Value (TLV) for Total or Nuisance (Inert) dust is 10 mg/m3.

+ Guaranteed to contain minimum of 70% Aluminum Oxide

++ Guaranteed to contain less than 1.5% Quartz

The OSHA PEL for the respirable fraction of quartz is:

$$\frac{10 \text{ mg/m}^3}{\% \text{SiO}_2 + 2}$$

V. HEALTH HAZARD DATA--Continued

Quartz-Continued

Human health effects: chronic overexposure by inhalation of crystalline silica may lead to typical x-ray changes and chronic fibrotic lung disease (silicosis), with shortness of breath and other respiratory symptoms. There are no reports of human sensitization to the product or its ingredients. Individuals with pre-existing diseases of the lungs may have increased susceptibility to the toxicity of excessive exposures to respirable dusts.

Carcinogenicity

No ingredient is listed as a carcinogen by IARC, NTP, OSHA, or the ACGIH.

Emergency and First Aid Procedures

Eye Contact: Flush well with running water to remove particulate. Get medical attention.

Skin Contact: Brush or vacuum off excess dust. Wash well with soap and water. Avoid blowing particulate into the atmosphere.

Inhalation: Remove to fresh air. Get medical attention.

Ingestion: Seek medial attention if large quantities of material have been ingested. In the form of the product, this should be unlikely.

VI. REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Stable under normal conditions of transport and storage. Avoid creating dust cloud.

Incompatibility: Acids, bases, and oxidizers.

Hazardous Decomposition or Byproducts: Metal oxides or fume.

Hazardous Polymerization: Will not occur.

VII. PRECAUTIONS FOR SAFE HANDLING OR USE

Steps to be Taken in Case Material is Released or Spilled:

No special precautions are necessary for spills of bulk material. Follow federal, and state, and local regulations concerning the disposal of waste.

Waste Disposal Method: Dispose of in accordance with federal, state, and local regulations. Cleanup personnel should wear respirators and protective clothing if dust clouds are created.

Precautions to be Taken in Handling and Storing: Store material away from incompatible materials: see Section VI.

Other Precautions: See all other sections of this Material Safety Data Sheet.

**Material Safety Data Sheet.**  
 May be used to comply with  
 OSHA's Hazard Communication Standard,  
 29 CFR 1910.1200. Standard must be  
 consulted for specific requirements.

**U.S. Department of Labor**  
 Occupational Safety and Health Administration  
 (Non-Mandatory Form)  
 Form Approved  
 OMB No. 1218-0072



**IDENTITY (As Used on Label and List)**  
 APACHE-BLAST

*Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.*

**Section I**

**Manufacturer's Name**  
 APACHE-BLAST, INC.

**Emergency Telephone Number**  
 (713) 468-5647

**Address (Number, Street, City, State, and ZIP Code)**  
 P.O. BOX 428.

**Telephone Number for Information**  
 (713) 468-5647

COPPERHILL, TN. 37317

**Date Prepared**  
 APRIL 1, 1987

**Signature of Preparer (optional)**

**Section II — Hazardous Ingredients/Identity Information**

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
IRON OXIDE (Fe <sub>2</sub> O <sub>3</sub> )	5mg/m <sup>3</sup>			CIRCA 50
SILICON (SiO <sub>2</sub> ; <0.1%FREE SILICA)	10mg/m <sup>3</sup>			CIRCA 37
ALUMINUM OXIDE (Al <sub>2</sub> O <sub>3</sub> )	10mg/m <sup>3</sup>			CIRCA 4
CALCIUM OXIDE (CaO)	2mg/m <sup>3</sup>			CIRCA 5
OTHER METALS AND OXIDES				CIRCA 4

**Section III — Physical/Chemical Characteristics**

<b>Boiling Point</b> +1800°C	<b>Specific Gravity (H<sub>2</sub>O = 1)</b> 3.3
<b>Vapor Pressure (mm Hg.)</b> N/A	<b>Melting Point</b> 1100°C
<b>Vapor Density (AIR = 1)</b> N/A	<b>Evaporation Rate (Butyl Acetate = 1)</b> N/A
<b>Solubility in Water</b> INSOLUBLE	

**Appearance and Odor**

THIS IS A SOLID GRANULAR SUBSTANCE, BLACK IN COLOR, WITHOUT ODOR.

**Section IV — Fire and Explosion Hazard Data**

<b>Flash Point (Method Used)</b> N/A	<b>Flammable Limits</b> N/A	<b>LEL</b> N/A	<b>UEL</b> N/A
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**Extinguishing Media**

WHATEVER IS APPROPRIATE FOR SURROUNDING FIRE.

**Special Fire Fighting Procedures**

N/A

**Unusual Fire and Explosion Hazards**

N/A



# Lancaster Laboratories

INCORPORATED  
225 NEW HORGAN PIKE LANCASTER, PA 17601

PP&L Company - Berwick  
Susquehanna S E S  
P. O. Box 467  
Berwick, PA 18603

Date Reported 6/ 3/87  
Date Submitted 5/ 8/87  
Discard Date 7/ 4/87  
Collected by C  
P.O. 6-97903-S  
Rel.

EP Tox Leachate of #229 Black Sand Blasting Grit

ANALYSIS	RESULT AS RECEIVED	LIMIT OF DETECTION	LAB CODE
Arsenic	< 0.004 mg/l	0.004	024502200
Barium	< 0.1 mg/l	0.1	024601200
Cadmium	< 0.005 mg/l	0.005	024901200
Chromium	< 0.05 mg/l	0.05	025101200
Lead	< 0.05 mg/l	0.05	025501200
Mercury	< 0.001 mg/l	0.001	025902200
Selenium	< 0.004 mg/l	0.004	026402200
Silver	< 0.01 mg/l	0.01	026601200

The above analyses were performed on an EP Toxicity leachate of the submitted waste prepared according to the procedure specified in Federal Register May 19 1980 p. 33127.

**Leachate Preparation:**

45.0 grams waste / 720 ml distilled water

Initial pH = 5.94. 2.0 ml of 0.5 N Acetic Acid was used to maintain the pH at 5.0. Final volume was 900 ml.

The characteristic of EP Toxicity is determined by whether any of the contaminant concentrations (mg/l) in the leachate exceed the following maxima (100 X's Primary Drinking Water Standards):  
Arsenic 5.0;  
Barium 100.0; Cadmium 1.0; Chromium 5.0; Lead 5.0 ; Mercury 0.2;  
Selenium 1.0; Silver 5.0; Endrin 0.02; Lindane 0.4; Methoxychlor 10.0  
Toxaphene 0.5; 2,4-D 10.0; 2,4,5-TP 1.0

Based on the determinations performed, the submitted sample DOES NOT exhibit the characteristic of EP Toxicity as defined in Section 261.24 Federal Register 1980 p. 33122.

1 COPY TO PP&L Company - Berwick  
1 COPY TO PP&L Company  
1 COPY TO PP&L Company

ATTN: Administrative Supervisor  
ATTN: David Ortz  
ATTN: John Hansel (A1-2)

The American Association for  
Laboratory Accreditation  
Chemical & Biological fields of testing

02290 135.00 026100



SEE REVERSE SIDE FOR EXPLANATION  
OF SYMBOLS AND ABBREVIATIONS

Respectfully Submitted  
Lancaster Laboratories, Inc.  
Reviewed and Approved by:

Lee A. Seats, B.S. Group Ldr.  
Inorganic Analysis





# ANALYSIS REPORT

## Lancaster Laboratories

INCORPORATED  
2425 NEW HOLLAND PIKE LANCASTER, PA 17601

PP&L Company - Berwick  
Susquehanna S E S  
P. O. Box 467  
Berwick, PA 18603

Date Reported 6/ 3/87  
Date Submitted 5/ 8/87  
Discard Date 7/ 4/87  
Collected by C  
P.O. 6-97903-S  
Rel.

EP Toxicity Leachate of #230 Apache Blast

ANALYSIS	RESULT AS RECEIVED	LIMIT OF DETECTION	LAB CODE
Arsenic	< 0.004 mg/l	0.004	024502200
Barium	< 0.1 mg/l	0.1	024601200
Cadmium	< 0.005 mg/l	0.005	024901200
Chromium	< 0.05 mg/l	0.05	025101200
Lead	0.07 mg/l	0.05	025501200
Mercury	< 0.001 mg/l	0.001	025902200
Selenium	< 0.004 mg/l	0.004	026402200
Silver	< 0.01 mg/l	0.01	026601200

The above analyses were performed on an EP Toxicity leachate of the submitted waste prepared according to the procedure specified in Federal Register May 19 1980 p. 33127.

**Leachate Preparation:**

45.0 grams waste / 720 ml distilled water

Initial pH = 5.53. 1.0 ml of 0.5 N Acetic Acid was used to maintain the pH at 5.0. Final volume was 900 ml.

The characteristic of EP Toxicity is determined by whether any of the contaminant concentrations (mg/l) in the leachate exceed the following maxima (100 X's Primary Drinking Water Standards): Arsenic 5.0; Barium 100.0; Cadmium 1.0; Chromium 5.0; Lead 5.0 ; Mercury 0.2; Selenium 1.0; Silver 5.0; Endrin 0.02; Lindane 0.4; Methoxychlor 10.0 Toxaphene 0.5; 2,4-D 10.0; 2,4,5-TP 1.0

Based on the determinations performed, the submitted sample DOES NOT exhibit the characteristic of EP Toxicity as defined in Section 261.24 Federal Register 1980 p. 33122.

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The American Association for Laboratory Accreditation  
Chemical & Biological fields of testing

02290 135.00 026100



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Respectfully Submitted  
Lancaster Laboratories, Inc.  
Reviewed and Approved by:

Lee A. Seats, B.S. Group Ldr.  
Inorganic Analysis