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**BEST AVAILABLE TECHNOLOGY DETERMINATION FOR REMEDIAL
CONSTRUCTION ACTIVITIES ON THE FERNALD ENVIRONMENTAL
MANAGEMENT PROJECT SITE**

01/30/97

**DOE-0449-97
DOE-FEMP OEPA
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LETTER**



Department of Energy

**Ohio Field Office
Fernald Area Office**

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JAN 30 1997

DOE-0449-97

**Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911**

Dear Mr. Schneider:

**BEST AVAILABLE TECHNOLOGY DETERMINATION FOR REMEDIAL CONSTRUCTION
ACTIVITIES ON THE FERNALD ENVIRONMENTAL MANAGEMENT PROJECT SITE**

**Reference: Informal Memorandum, Thomas Schneider (OEPA) to Johnny Reising
(DOE-FEMP), "Draft Best Available Technology Demonstration," dated
January 2, 1997.**

Over the past few months discussions have progressed regarding the determination of Best Available Technology (BAT) for the control of fugitive dust on the Fernald Environmental Management Project (FEMP) site. The Department Of Energy (DOE) has reviewed the Ohio Environmental Protection Agency's (OEPA) latest draft BAT determination, dated January 2, 1997, and generally agrees that it is an acceptable implementation of fugitive dust control technologies. The purpose of this letter is to accept the draft BAT and propose the following minor modifications (a full version of this BAT determination is enclosed):

- 1. Fugitive dust controls will be required only if fugitive dust emissions are visible. This is to preclude the possible misinterpretation that fugitive dust controls are required regardless of the environmental situation; i.e., the spraying of water during a rain storm or any other such counterproductive actions.**
- 2. All areas not specifically delineated in approved project-specific plans as paved roadways and parking areas; unpaved roadways and parking areas; or inactive material storage piles, are considered construction activities and are subject to the visible emission standard such that visible emission of fugitive dust shall not exceed 20% opacity as a three minute average. The actual working of material storage piles will be considered as a part of construction activities for BAT purposes.**

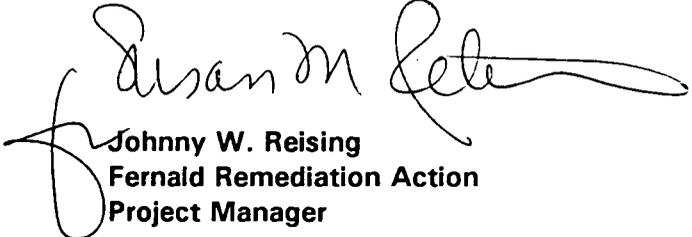
3. The emission standards proposed as compliance demonstrations (one minute per 60 minute period for paved roadways, parking areas and storage piles and three minutes per 60 minute period for unpaved roadways and parking areas) will instead be used as administrative triggers indicating a need to increase the level of control, up to and including the possible slowdown or cessation of construction operations.

The DOE agrees to utilization of the proposed emissions standards as triggers for increased controls, but does not agree with their use as enforceable emission limitations. The definition of BAT contained in Ohio Revised Code 3704.01(F) specifically specifies BAT as a combination of any or all of six major groupings: 1) work practices; 2) raw material specification, 3) throughput limitations; 4) source design characteristics; 5) an evaluation of the annualized cost per ton of pollutant removed; and, 6) air pollution control devices that have been previously demonstrated to the Director of Environmental Protection to operate satisfactory in this state or other states with similar air quality on substantially similar air pollution sources. Not included under this definition is "emission limit" or "emission standard."

In summary, the DOE accepts the BAT determination based on OEPA's demonstration that these requirements have been applied precedentially in similar situations and that these controls are achievable cost-effectively. However, the BAT should be established on a site-specific basis and therefore, the DOE reserves the right to revisit this BAT determination (if experience shows that implementing these controls is not cost-effective and presents undue hardships and delays in completing site remediation). This approach will ensure minimum fugitive dust impact and a cost effective site cleanup.

If you have any questions concerning this matter, please contact Kathi Nickel at (513) 648-3166.

Sincerely,



Johnny W. Reising
Fernald Remediation Action
Project Manager

Enclosure: As stated

cc w/enc:

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General BAT Determination for the control of Fugitive Dust

1. Fugitive dust controls will be required only if fugitive dust emissions are visible.
2. The various areas covered by this BAT are specifically delineated and agreed to prior to commencement of construction.
3. The actual working of material storage piles will be considered as a part of construction activities for BAT purposes.
4. All areas not specifically delineated as paved roadways and parking areas; unpaved roadways and parking areas; or inactive material storage piles, are considered construction activities.

Activity	Controls (to be applied progressively, as needed)	Administrative action levels	Compliance Determination/ Record keeping Requirements
Paved roadways and parking areas	<ul style="list-style-type: none"> - Use of dust suppression material: water, resin, oil or equivalent combination of surfactant or crusting agents. - Sweeping: use of mobile sweeper to minimize the dust and silt buildup on paved surfaces. - Speed limitation: Speed limited to 15 miles per hour. - Wheel washer: use of wheel washer to remove dirt from automobile tires prior to traveling on public roadways. - Surface Improvements: repair or resurface as needed. - Covers on trucks: Covers will be utilized when visible emission from material conveyed are detected. 	<ul style="list-style-type: none"> -one minute visible emissions per 60 minute period as an indicator of a need for increase fugitive dust controls up to and including a slowdown or cessation of construction activities 	<p>Compliance Determination:</p> <p>OAC 3745-17-07(B)(4): There shall be no visible particulate emission from any paved roadway or parking area except for a period of time not to exceed six minutes during any sixty-minute observation period.</p> <p>Maintain daily records on the following information:</p> <ul style="list-style-type: none"> a) Identification of the segment of the paved areas that was treated and/or cleaned; b) the date the paved area was treated and/or cleaned; c)the manner the paved area was treated and/or cleaned; d) the application rate of water and any chemical additives; and e) the name of the equipment operator responsible for the treatment and/or cleaning.

Activity	Controls (to be applied progressively, as needed)	Administrative action levels	Compliance Determination/ Record keeping Requirements
Unpaved roadways and parking areas	<ul style="list-style-type: none"> - Use of dust suppression material: water, resin, oil or equivalent combination of surfactant or crusting agents. - Speed limitation: Speed limited to 15 miles per hour. - Wheel washer: use of wheel washer to remove dirt from automobile tires prior to traveling on public roadways. - Surface Improvements: repair or resurface as needed. - Covers on trucks: Covers will be utilized when visible emission from material conveyed are detected. 	<ul style="list-style-type: none"> -three minutes visible emissions per 60 minute period as an indicator of a need for increase fugitive dust controls up to and including a slowdown or cessation of construction activities 	<p>Compliance Determination:</p> <p>OAC 3745-17-07(B)(5): There shall be no visible particulate emission from any paved roadway or parking area except for a period of time not to exceed thirteen minutes during any sixty-minute observation period.</p> <p>Maintain daily records on the following information:</p> <ul style="list-style-type: none"> a) identification of the segment of the unpaved areas that was treated and/or cleaned; b) the date the unpaved area was treated and/or cleaned; c)the manner the unpaved area was treated and/or cleaned; d) the application rate of water and any chemical additives; and e) the name of the equipment operator responsible for the treatment and/or cleaning.
Material Storage Piles	<ul style="list-style-type: none"> - Use of dust suppression material: water, resin, oil or equivalent combination of surfactant or crusting agents. - Limit the traffic: minimize the amount of traffic in and around the storage piles. - Covers on piles: the use of covers where practical. 	<ul style="list-style-type: none"> -one minute visible emissions per 60 minute period as an indicator of a need for increase fugitive dust controls up to and including a slowdown or cessation of construction activities 	<p>Compliance Determination:</p> <p>OAC 3745-17-07(B)(6): There shall be no visible particulate emission from any paved roadway or parking area except for a period of time not to exceed thirteen minutes during any sixty-minute observation period.</p>
Other Construction Activities	<ul style="list-style-type: none"> - Use of dust suppression material: water, resin, oil or equivalent combination of surfactant or crusting agents. - Limit the traffic: minimize the amount of traffic in and around the construction areas. - Speed limitation: Speed limited to 15 miles per hour. 		<p>Visible particulate emissions from construction activities shall not exceed twenty percent (20%) opacity as a three minute average.</p> <p>None</p>