Department of Environmental Protection

Jeb Bush
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

May 4, 2000

Mr. Gregg Worley, Chief
Air, Radiation Technology Branch
Preconstruction/HAP Section
U.S. EPA – Region IV
61 Forsyth Street
Atlanta, Georgia 30303

Re: Wheelabrator Ridge Energy
Construction of High Efficiency Wet Scrubber System for Ash Handling Building Ventilation
1050216-004-AC, PSD-FL-292

Dear Mr. Worley:

Enclosed for your review and comment is an application for the above mentioned project.

Your comments can be forwarded to my attention at the letterhead address or faxed to me at (850)922-6979. If you have any questions, please contact John Reynolds at (850)921-9536.

Sincerely,

A. A. Linero, P.E.
Administrator
New Source Review Section

AAL/kt

Enclosures

cc: J. Reynolds, BAR

Department of
Environmental Protection

Jeb Bush
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

May 4, 2000

Mr. John Bunyak, Chief
Policy, Planning & Permit Review Branch
NPS-Air Quality Division
Post Office Box 25287
Denver, Colorado 80225

Re: Wheelabrator Ridge Energy
Construction of High Efficiency Wet Scrubber System for Ash Handling Building Ventilation
1050216-004-AC, PSD-FL-292

Dear Mr. Bunyak:

Enclosed for your review and comment is an application for the above mentioned project.

Your comments can be forwarded to my attention at the letterhead address or faxed to the Bureau at (850)922-6979. If you have any questions, please contact John Reynolds at (850)921-9536.

Sincerely,

5/4

A. A. Linero, P.E.
Administrator
New Source Review Section

AAL/kt

Enclosures

cc: J. Reynolds, BAR

INTEROFFICE MEMORANDUM

Sensitivity: COMPANY CONFIDENTIAL

Date: 03-May-2000 08:20am
From: Alvaro Linero TAL
LINERO_A
Dept: Air Resources Management
Tel No: 850/921-9523

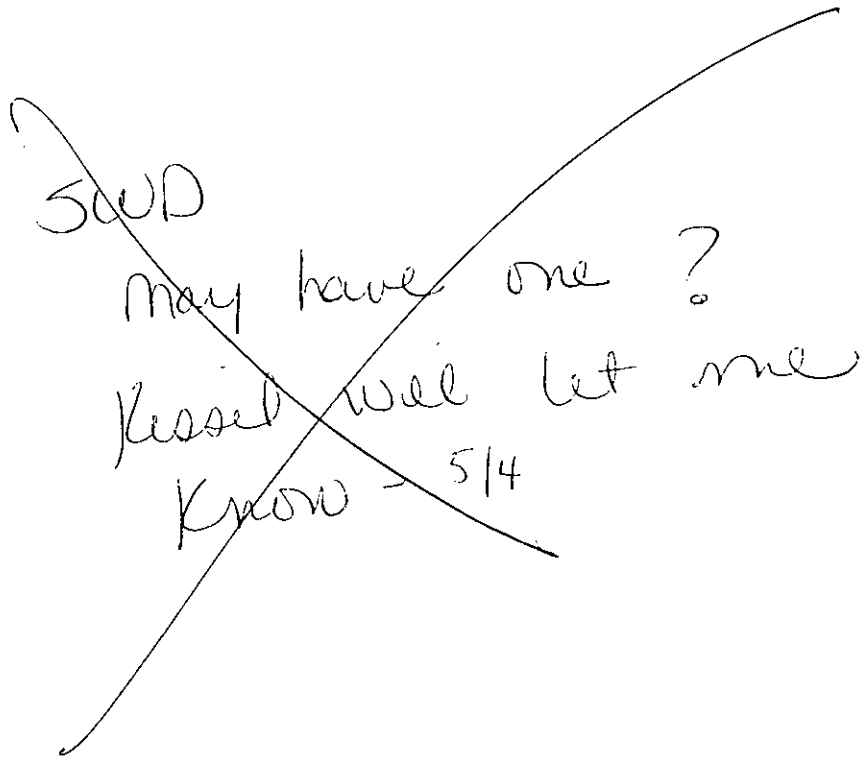
To: John Reynolds TAL (REYNOLDS_J)
To: Kim Tober TAL (TOBER_K)

Subject: Wheelabrator Ridge

John. You get this one. Work out with Gerry Kissel how to coordinate AC and Title V action so there is only one public notice.

Kim. It looks like they have a Title V permit so no fee is necessary. Work it out with John whether or not copies need to go with EPA. I have nothing to add to any letter to EPA. Send a copy to Polk County and SWD.

Thank you.



WHEELABRATOR RIDGE ENERGY INC.
A WASTE MANAGEMENT COMPANY

3131 K-Ville Avenue
Auburndale, FL 33823
(863) 665-2255
(863) 665-0400 Fax

Certified Mail 7000-0520-0014-8793-1113

April 21, 2000

Mr. John Reynolds
Mail Stop 5505
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Fl 32399-2400

RE: **Wheelabrator Ridge Energy - Title V Permit No. 1050216-001-AV;**
Modification to PSD Permit AC53-206244 (PSD-FL-183A) and Title V Air Operating Permit 1050216-001-AV;
Construction of High Efficiency Wet Scrubber System for Ash Handling Building Ventilation.

1050216-004-AC
PSD-FL-292

Dear Mr. Reynolds:

Attached you will find two copies of the Florida Department of Environmental Protection's Form No. 62-210.900(1) "Application for Air Permit - Long Form" for Wheelabrator Ridge Energy. Wheelabrator requests a modification of PSD Permit No. AC53-206244 for the Ridge Generating Station for the construction of a high efficiency wet scrubber system for ventilation of the reconstructed ash handling building. Wheelabrator further requests a modification to Title V Air Operating Permit No. 1050216-001-AV to allow operation of the wet scrubber system. The system is to be installed on the reconstructed ash building to provide ventilation for employee comfort and safety.

Also attached you will find two drawings, one of the proposed location for the scrubber and one of the Tri-Mer Corp high efficiency wet scrubber proposed for installation.

If you have any questions please contact John Neil at (863) 665-2255 Ext 250.

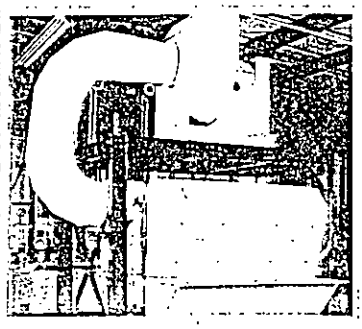
Sincerely Yours

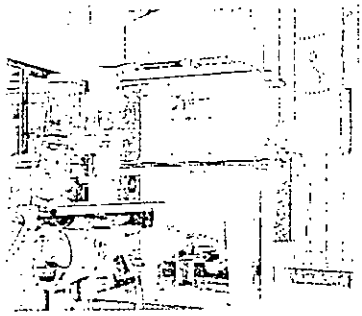
John N Rivara
Plant Manager

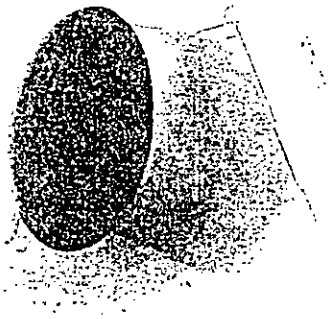
cc G. Kissel (DEP Southwest District) ✓
T. Porter (WESI)

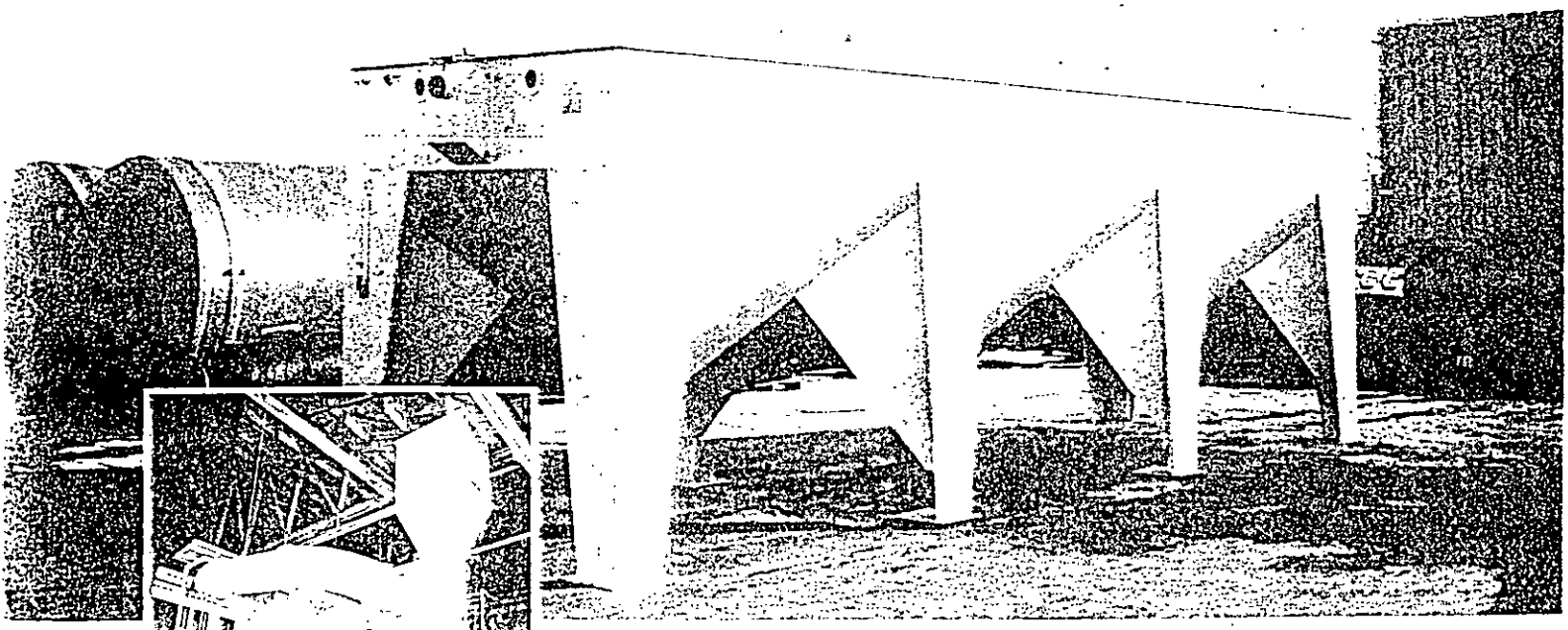
CC: EPA
NPS
polk Co
file

Tri-Mer® Whirl Wet®







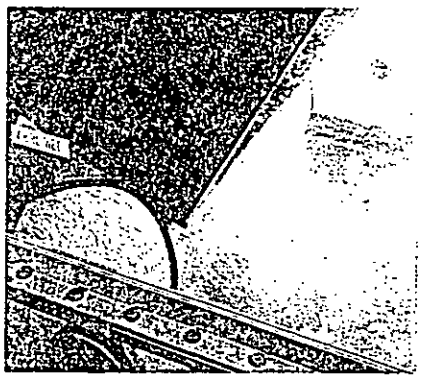


High Efficiency Wet Dust Collection with Low Maintenance and Operating Costs

Concept and Operation

Tri-Mer's Whirl Wet is a time-proven "workhorse" designed for continuous, predictable dust collection. It has **no moving parts** and none of the traditional "high maintenance" components such as spray nozzles, pumps or bags that can disrupt production. Instead, the Whirl Wet employs a unique process to create intensive mixing of the dust particles and water.

In order to infuse dust particles with water droplets, the mixture is passed under high velocity through a fixed-position dual opposed blade system. The mixing of the dust-laden airstream and liquid takes place and, to increase turbulence, a tangential airstream is injected through a linear slot in the lower blade assembly. Rotation is accelerated, droplets in the airstream are eliminated through a mist eliminator located downstream, and particulate material is deposited on the bottom of the unit for recovery or disposal. Water level is maintained automatically and make-up water is only necessary to compensate for evaporation or sludge removal.

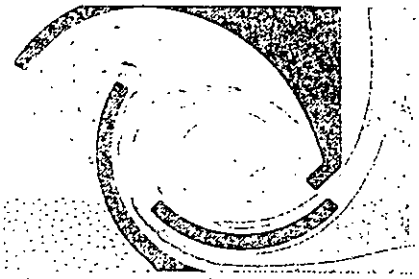


The whirl chamber under operating conditions. Note the energy-activated water coming off the top blade section.

Whirl Wet operates in the 99% efficiency range for a wide variety of applications and over a wide range of micron sizes. These efficiencies are significantly higher than those that can be achieved with cyclones or wet plate scrubbers. It is equally effective for both soluble and insoluble particles. Applications, including dye manufacturing and food processing, are ideally suited to the Whirl Wet. Energy generated inside the unit will not allow the system to clog under any operating conditions; **therefore, the agglomeration and sticky residues that often plug dry collectors are not a problem with the Whirl Wet.**

Whirl Wet is a frequently specified dust collection system for the collection of coal, aluminum, fertilizer and sugar dust, and is widely used for the dust elimination requirements of the **foundry shakeout industry, lead particulate in the battery industry** and virtually every sector of the **process industries.** Dust collection from **grinding processes** and **food spices** are excellent applications for the Whirl Wet. Hydrogen venting is provided for applications generating hazardous quantities of hydrogen gas. It is becoming the leading dust collection alternative for plants where metal or plastic finishing generates dust as small as one micron.

Whirl Wet is particularly advantageous wherever materials recovery is desirable. Processes that were not formerly candidates for materials recovery have become good candidates as a result of the Whirl Wet, yielding significant economic benefits for the processor.

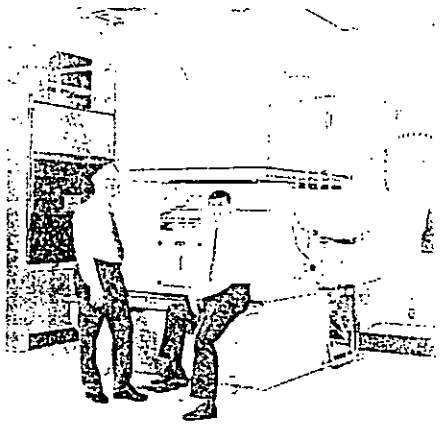


The whirl chamber performs the most critical function in a Whirl Wet's operation. This chamber causes water and particulate to combine, resulting in high-efficiency dust collection.

CASE STUDY

Chrysler Corporation

To maintain a clean and pleasing environment on the 1,600,000 sq. ft. shop level, where the development and manufacturing of prototypes takes place, Chrysler specified dust collection that would not only satisfy strict requirements for collection efficiency, but meet stringent specifications for noise as well. Specifically, by operating at a noise level of less than 80 db at one meter, comfort and communication would both be enhanced and there would be no requirement for a monitoring program to guard against long-term hearing loss.



Ray Gryniewicz, Technical Equipment Manager, Facilities, of Chrysler Corporation and Todd Ainsworth, Sales Engineer of Tri-Mer Corporation with one of the eight systems installed at Chrysler Tech Center.

Equipment proposed by the architectural firm managing the project was unable to meet Chrysler's low noise specification, even when demonstrated under controlled production conditions, with special shielding. Modifications to meet the noise maximum would have involved costly total system enclosures, thus Chrysler requested proposals from other manufacturers.

After reviewing various dust collection technologies and vendors, Chrysler awarded a contract for eight wet dust collectors to Tri-Mer.

Systems are activated on an "as needed" basis; when needed, they are instantly "on" and fully operational.

Technical Data

Whirl Wet Model #	Min. CFM	Std. CFM	Max. CFM	A	B	C	D	E	F	H	J	K	L	M	O	P	Q	R
W/W-5	425	500	525	18.5"	6.5"	69"	86.5"	95"	48"	5"	-	-	-	-	-	-	-	-
W/W-6	510	600	630	20"	8"	69"	86.5"	95"	48"	5"	-	-	-	-	-	-	-	-
W/W-8	630	800	840	22.5"	10.5"	69"	86.5"	95"	48"	6"	-	-	-	-	-	-	-	-
W/W-10	840	1000	1050	25"	13"	69"	86.5"	95"	48"	7"	-	-	-	-	67.5"	67"	58.5"	41"
W/W-12	1020	1200	1260	28"	16"	69"	86.5"	95"	48"	7"	-	-	-	-	67.5"	67"	58.5"	41"
W/W-15	1260	1500	1575	32"	20"	69"	86.5"	95"	48"	8"	-	-	-	-	67.5"	67"	58.5"	41"
W/W-18	1530	1800	1890	35"	24"	69"	86.5"	95"	48"	9"	-	-	-	-	67.5"	67"	58.5"	41"
W/W-22	1870	2200	2310	41"	29"	69"	86.5"	95"	48"	10"	-	-	-	-	67.5"	67"	58.5"	41"
W/W-28	2310	2800	2940	49"	37"	69"	86.5"	95"	48"	11"	90"	52"	89.5"	78"	67.5"	67"	58.5"	41"
W/W-34	2890	3400	3570	57"	45"	69"	86.5"	95"	48"	12"	90"	52"	89.5"	78"	67.5"	67"	58.5"	41"
W/W-40	3400	4000	4200	65"	53"	69"	86.5"	95"	48"	13"	90"	52"	89.5"	78"	67.5"	67"	58.5"	41"
W/W-50	4200	5000	5250	78"	66"	69"	86.5"	95"	48"	14"	90"	52"	89.5"	78"	67.5"	67"	58.5"	41"
W/W-60	5100	6000	6300	91.5"	79.5"	69"	86.5"	95"	48"	15"	90"	52"	89.5"	78"	67.5"	67"	58.5"	41"
W/W-70	5950	7000	7350	70.5"	46.5	85"	109"	117"	38"	15"	134"	64"	88"	99"	104"	90"	81.5"	58"
W/W-80	6800	8000	8400	77"	53"	85"	109"	117"	38"	19"	134"	64"	88"	99"	104"	90"	81.5"	58"
W/W-100	8400	10000	10500	90"	66"	85"	109"	117"	38"	20"	134"	64"	88"	99"	104"	90"	81.5"	58"
W/W-120	10200	12000	12600	103.5"	79.5"	89"	117"	126"	96"	22"	142"	68"	96"	105"	112"	96"	86.5"	59"
W/W-140	11900	14000	14700	116.5"	92.5"	89"	117"	126"	96"	24"	142"	68"	96"	105"	112"	96"	86.5"	59"
W/W-170	14450	17000	17850	136.5"	112.5"	94"	124"	135"	102"	26"	148"	73"	103"	114"	-	-	-	-
W/W-200	17000	20000	20800	156.5"	132.5"	94"	124"	135"	102"	30"	148"	73"	103"	114"	-	-	-	-
W/W-240	20400	24000	25200	183"	159"	100"	132"	145"	112"	32"	156"	79"	111"	124"	-	-	-	-
W/W-280	23800	28000	29400	209.5"	185.5"	100"	132"	145"	112"	34"	156"	79"	111"	124"	-	-	-	-
W/W-320	27200	32000	33600	236"	212"	107"	150"	168"	132"	38"	178"	86"	129"	147"	-	-	-	-
W/W-360	30600	36000	37800	262.5"	238.5"	108"	152"	171"	132"	40"	178"	87"	131"	147"	-	-	-	-
W/W-400	34000	40000	42000	289"	265"	113"	163"	180"	144"	42"	190"	98"	142"	169"	-	-	-	-
W/W-450	38250	45000	47250	322"	298"	123"	169"	190"	152"	44"	198"	102"	148"	177"	-	-	-	-
W/W-500	42500	50000	52500	355"	331"	127"	174"	196"	160"	48"	206"	106"	153"	185"	-	-	-	-

Dimensions are approximate: consult Tri-Mer for exact size.