TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Sun West Acquisitions, Inc.
16405 US Highway 19
Hudson, Florida 34667

Sun West Mine

Facility ID No. 1010515

PROJECT

Project No. 1010515-001-AC
Application for Minor Air Construction Permit
Project Name: Air Curtain Incinerator

COUNTY

Pasco County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Management
Southwest District Office
Temple Terrace, Florida 33637-7600

July 23, 2013

Prepared by Nwankaku Onwunli

GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

I. Facility Description:

This project is for the initial construction of an air curtain incinerator.

II. Project Description:

A. Applicant:

John G. Grubbs, President
Sun West Acquisitions, Inc.
PO Box 468
Aripeka, Florida 34679

B. Professional Engineer:

James Shirk
Creative Environmental Solutions, Inc.
700 DeSoto Avenue
Brooksville, Florida 34601

C. Project Location:

16405 US Highway 19
Hudson, Florida 34667
(West of US 19 on Old Dixie Highway)

D. Project Summary:

This project is the initial air construction permit for a proposed air curtain incinerator to control air emissions from the disposal of wood waste ignited within an earthen trench or thermo ceramic lined pit. The fan within the air curtain incinerator is powered by a 125 HP engine that is fired with diesel fuel at 2,160 gallons/yr.

T-350 Series Manifold Extended

E. Application Information:

Application Received on: July 11, 2013
Additional Information Requested on: Not Applicable
Additional Information Received on: Not Applicable
Application Complete on: July 11, 2013

III. Applicable State and Federal Regulations

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes and Chapters 62-204 through 62-297, Florida Administrative Code (F.A.C.), as indicated below.

Subject to:	**Y/N**	**Comments**
Rule 62-210.300, F.A.C. – Permits Required	Y	subject to general permitting requirements
Rule 62-212.400, F.A.C. - Prevention of Significant Deterioration	N	facility is not a PSD major source
Rule 62-296.320(4), F.A.C. - General Particulate Emission Limiting Standards	Y	burning operations will require VE testing, could be a source of unconfined particulate matter emissions
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards (VOCs and Odor)	Y	burning operations are not a source of VOC, but may be a source of odors
Rule 62-296.401-418, F.A.C. - Stationary Source Emission Standards	Y	Facility is subject to Rule 62-296.401(7),F.A.C. – Air Curtain Incinerators
Rule 62-296.500, F.A.C. - Reasonably Available Control Technology (VOC)	N	Pasco County is an attainment area for ozone and not an air quality maintenance area for ozone
Rule 62-296.700, F.A.C. - Reasonably Available Control Technology (PM)	N	this is a new source, therefore not subject to PM RACT rule
Rule 62-204.800, F.A.C. - Standards of Performance for New Stationary Sources (NSPS)	Y	Facility is subject to 40 CFR 40, Subpart CCCC
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants (NESHAPS – 40 CFR 61)	N	there is no applicable source category
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants for Source Categories a.k.a. MACT (NESHAPS –40 CFR 63)	N	there is no applicable source category
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution	N	facility is a synthetic non-Title V source
Rule 62-297.310, F.A.C. - General Compliance Test Requirements, F.A.C.	Y	VE testing is required for EU No. 001.

IV. Summary of Emissions

EU No. 001- Air Curtain Incinerator		
Pollutant	**Potential Emissions** (tons/yr)	**Allowable Emissions** (opacity)
PM/ PM_{10}	19.5[1]	
NO_x	6.0[2]	
SO_2	0.15[3]	
VE		10% (35% during startup)

[1]Potential Emissions estimated using maximum charging rate of 3,000 tons/ yr and an emission factor of 13 lb PM/ton from AP 42 Table 2.1-12.

[2]Potential Emissions estimated using maximum charging rate of 3,000 tons/yr and an emission factor of 4 lb NO_x/ton from AP 42 Table 2.1-12.

[3]Potential Emissions estimated using maximum charging rate of 3,000 tons/yr and an emission factor of 0.1 lb SO_2/ton from AP 42 Table 2.1-12.

Note: Using AP 42 Table 2.1-12, there are no data for CO and VOC.

V. Conclusions

The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-204 through 297, F.A.C.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-204 through 297, F.A.C.

VI. Preliminary Determination

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Environmental Protection Air Resource Management, Southwest District 13051 North Telecom Parkway, Temple Terrace, Florida 33637-7600.

Pursuant to Section 403.087, Florida Statutes and Section 62-4.070, Florida Administrative Code, the Department hereby gives notice of its intent to issue a permit to construct the aforementioned air pollution source in accordance with the draft permit and its conditions as stipulated (see attached).