



KOOGLER & ASSOCIATES, INC.  
ENVIRONMENTAL SERVICES

4014 NW 13th STREET  
GAINESVILLE, FL 32609-1923  
352/377-5822 ▪ FAX/377-7158

KA519-08-13  
June 11, 2009

Nancy E. Knight  
FDEP Southwest District  
13051 N Telecom Parkway  
Temple Terrace, FL 33637-0926

Subject: Submittal of Air Operation Permit Renewal  
C. W. Roberts Contracting Inc. – Wildwood Asphalt Plant  
Operation Permit No.: 7775176-002-AO  
Second Request for Additional Information

Dept. Of Environmental Protection

JUN 18 2009

Southwest District

Dear Mrs. Knight,

On behalf of C.W. Roberts Contracting, Inc. (CWR), I am submitting the following information in response to your letter to Charles W. Roberts requesting additional information dated February 18, 2009. I appreciate your allowance for additional time per emails on May 8 and June 11, 2009 (through June 19, 2009). Please note the email version of the package does not include the signature of the authorized representative. The hardcopies do include that signature. The format of responses is provided in the sequence of requested information. Four copies of the response are included.

Please note the response information refers to the conference call on May 5, 2009 with FDEP personnel (Mara Nasca, Cindy-Zhang Torres, Nancy Knight and Ronni Moore) and C.W. Roberts personnel (myself, Joseph Shuler, and Angela Morrison Uhland—legal counsel).

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1. Emissions Unit Information

Answer: Based on the discussion of the conference call on May 5, 2009, a revised operation renewal permit application is attached (Attachment 1). The revised application provides potential emissions from the facility operating without RAP crushing and with RAP crushing. The potential emissions of the hypothetical RAP crushing system used for emissions calculations is of a crushing system that can easily crush over 200 tons per hour. The facility is currently permitted to crush up to 200 tons per hour. The following conservative assumptions of the hypothetical crusher unit were performed for the emissions calculations as reasonable assurance of compliance of the existing permit conditions.

As a conservative assumption in this application, the hypothetical crusher unit engines (engine for crusher and engine for screens and conveyors) are assumed to be non-electric and consume twice the amount of fuel needed for crushing 200 ton RAP per hour. Based on this conservative annual fuel consumption, such a unit consumes 32,000 gal/yr to crush 200,000 tons/yr of RAP. However, the air construction permit application from

2002 proposed an even more conservative assumed fuel consumption of 50,770 gal/yr. For this application, emissions information is based on the higher amount of 50,770 gal/yr.

As an additional conservative measure, the potential fugitive particulate matter emissions from the entire crusher unit (crusher, screens, conveyors, and material handling) are doubled. These assumptions should provide a conservative estimate of the potential annual emissions from any RAP crusher system owned or operated by CWR (or other company) having an AG permit that might be used at the Wildwood facility (due to the limits on fuel consumption and material usage

Please note the crusher unit ID that I referred to in the 2002 air construction permit application, 7775158-001-AG was the wrong crusher AG permit number. Dickson Dibble of FDEP, by telephone, tells me that the internal FDEP database provides specifics of all crusher units and this crusher was registered to Lee Hoffman d.b.a. Hoffman Demolition. The correct AG number for CWR's crusher is 7775155. This crusher remains active under permit 7775155-002-AG.

Any RAP crusher operated on-site at the Wildwood facility must have an air general (AG) permit and tested accordingly. In addition to submittal of the information required by AG permitting, any AG-permitted crusher unit to be moved to Wildwood that is to be operated at the Wildwood site in a manner that is not representative of conditions existing during the most recent compliance test, CWR proposes to inform the SW District with the relocation notice, to retest the unit at the Wildwood site within 30 days of the unit arriving at Wildwood, and to notify the Department within 15 days of the scheduled testing. A unit that operates in a manner not representative of a prior compliance test would be any crusher unit that includes replaced or additional equipment that was not present during most recent testing or if the unit was tested with any material having lower emission factors than that to be crushed at Wildwood. Based on my engineering judgment and experience, emissions of crushed stone, typical C&D debris, or crushed concrete have higher emissions than RAP because RAP includes asphalt bitumen which acts as a binder for dust. In reality, the CWR crushers, including those at the Wildwood facility, are exclusively used for RAP crushing. The likelihood of testing on other than RAP is very unlikely.

The proposed specific additional testing requirements should provide conservative and reasonable assurance that the crusher unit is operating in a representative manner within the permitted VE limits and appear to be beyond what the SW District has required for other similar asphalt facilities (see e.g., 1010041-009-AO).

Applicability of 40 CFR 60, subpart IIII: CWR agrees that if engines used at the facility are subject to stationary Compression Ignition Internal Combustion Engines (CI ICE) NSPS, Subpart IIII (40 CFR 60.4200(a)), CWR must comply with this rule. As such, the permit should reflect requirements of this new rule.

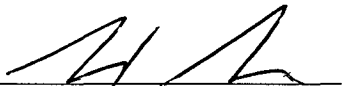
Of the three CWR-operated crushers and the many potential crusher units that are AG-permitted and could operate at Wildwood, the relevant information of the subpart applicability, e.g., unit manufacturer year and model, is provided in each AG application and input to the internal FDEP database. Should another RAP crusher be relocated to the Wildwood site (whether it is owned and operated by CWR or another company), CWR will be providing the AG permit number with the relocation notification, and the NSPS applicability information for that unit should be accessible to the SW District through the FDEP database. In addition, NSPS compliance information from the manufacturer of the crusher engine can be provided by CWR to the SW District if requested for any crusher units brought on-site to the Wildwood facility.

2. Required Documentation

Answer: Please find enclosed in Attachment 2, the requested documentation that shows crushing for the year which occurred in June and July 2008.

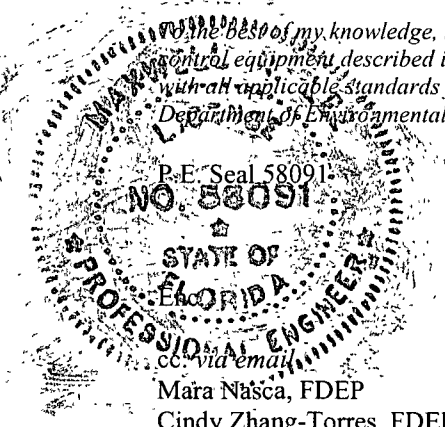
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If you have any questions concerning the application, please call me at (352) 377-5822.

Sincerely,

  
\_\_\_\_\_  
Max Lee, Ph.D., P.E.  
KOOGLER & ASSOCIATES

6/10/09  
\_\_\_\_\_  
Date

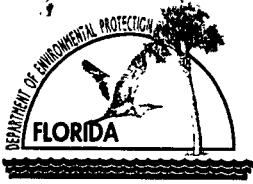
*To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection.*



P-E Seal 58091  
NO. 58091  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
cc: via email  
Mara Nasca, FDEP  
Cindy Zhang-Torres, FDEP  
Ronni Moore, FDEP  
Angela Morrison-Uhland, Hopping Green, and Sams, P.A.  
Joseph Shuler, C. W. Roberts Contracting, Inc.

ATTACHMENT 1

AIR PERMIT MODIFICATION APPLICATION



# Department of Environmental Protection

## Division of Air Resources Management

### APPLICATION FOR NON-TITLE V AIR PERMIT RENEWAL

See Instructions for Form No. 62-210.900(4)

#### I. APPLICATION INFORMATION

##### Identification of Facility

1. Facility Owner/Company Name: <b>C W Roberts Contracting, Inc.</b>	
2. Site Name: Wildwood Asphalt Plant	
3. Facility Identification Number: 7775176	4. Facility Status Code: A

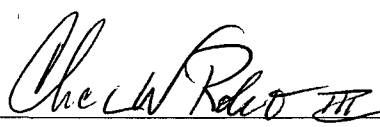
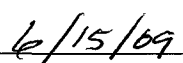
##### Application Contact

1. Name and Title of Application Contact: Maxwell Lee, Ph.D., P.E., Senior Project Engineer
2. Application Contact Mailing Address:  Organization/Firm: Koogler & Associates, Inc. Street Address: 4014 NW 13 <sup>th</sup> Street City: Gainesville State: FL Zip Code: 32609
3. Application Contact Telephone Numbers: Telephone: (352)377-5822 Fax: (352) 377- 7158

##### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	

**Owner/Authorized Representative**

1. Name and Title of Owner/Authorized Representative: Charles W. Roberts, President
2. Owner/Authorized Representative Mailing Address:  Organization/Firm: C. W. Roberts Contracting, Inc. Street Address: P.O. Box 188 City: Hosford State: FL Zip Code: 32334
3. Owner/Authorized Representative Telephone Numbers: Telephone: (850)379-8116 Fax: (850)379-8188
4. Owner/Authorized Representative Statement:  <i>I, the undersigned, am the owner or authorized representative* of the facility addressed in this Application for Air Permit. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. Further, I agree to operate and maintain the air pollutant emissions units and air pollution control equipment described in this application so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>   _____ Signature   _____ Date

\* Attach letter of authorization if not currently on file.

**Scope of Application**

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
001	CMI drum mix asphalt plant	NA	
unknown	Crushing Operations	NA	
	(fee previously submitted for AO renewal)		

**Application Processing Fee**

Check one: [  ] Attached - Amount: \$ \_\_\_\_\_ [  ] Not Applicable

**Application Comment**

**Project is to address concerns of FDEP per conference call discussion on 5/5/2009 with FDEP personnel (Mara Nasca, Cindy-Zhang Torres, Nancy Knight and Ronni Moore) and C.W. Roberts personnel (Joseph Shuler, Angela Morrison Uhland—legal counsel, and Max Lee-project engineer,).**

**This revised permit application provides potential emissions from the facility and a comparison of potential emissions for A) only operating the asphalt plant and B) operating the asphalt plant and the RAP crusher. Note the facility-wide fuel usage is limited to 1.2 mmgal/yr and product (asphalt and RAP crushed) to 500,000 tons per year.**

**As a conservative assumption, the RAP crusher potential emissions are based on a diesel engine with twice the power (fuel usage 15.5gal/hr x 2 = 31 gal/hr) of a unit capable of 200 ton of RAP crushed/hr. The permit currently allows up to 200 tons per hour. The annual fuel usage estimate for the crushing system in 2002 was more conservative than the above assumption (50.77 TGB in 2002, versus 31gal/200ton x 200,000 ton/yr = 31 TGB in this application). Therefore, potential annual emissions are based in this application on the 2002 annual fuel usage of 50.77 gal/yr. Annual potential emissions remain below the Title V threshold (100 tpy). Another conservative assumption is that the total crusher unit fugitive PM emissions are doubled the calculated amount. See attachment A, pg 3. of this application.**

**This application will allow no new construction or modification and only provides revisions of emission estimates previously submitted.**

## II. FACILITY INFORMATION

### Facility Contact

1. Name and Title of Facility Contact: <b>Charles W. Roberts, President</b>
2. Facility Contact Mailing Address: Organization/Firm: <b>C. W. Roberts Contracting, Inc.</b> Street Address: <b>P. O. Box 188</b> City: <b>Hosford</b> State: <b>FL</b> Zip Code: <b>32334</b>
3. Facility Contact Telephone Numbers: Telephone: <b>(850) 379-8116</b> Fax: <b>(850) 379-8188</b>

### Facility Supplemental Requirements

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
2. Facility Plot Plan: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
3. Process Flow Diagram(s): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested

### Facility Comment

<b>No changes to the current permit conditions are requested.</b>
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**III. EMISSIONS UNIT INFORMATION**

A separate Emissions Unit Information Section must be completed for each emissions unit addressed in this Application for Non-Title V Air Permit Renewal. If submitting the form in hard copy, indicate, in the space provided at the top of each page, the Emissions Unit ID of the emissions unit addressed on the page, as given in the unit's most current air operation permit.

**Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): <b>CMI Drum mix asphalt plant</b>	
2. Emissions Unit Status Code: <b>A</b>	3. Long-Term Reserve Shutdown Date:
4. Control Equipment Method/Description (limit to 200 characters per device or method): <b>CMI Roto-Aire 318P Fabric Filter baghouse</b>  Code 016	

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Heat Input Rate:		mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate: 400 tph, 500,000 ton/year		
5. Requested Maximum Operating Schedule:		
	hours/day	days/week
	weeks/year	8760 hours/year

Emissions Unit ID 001

**Emissions Unit Supplemental Requirements**

1. Fuel Analysis or Specification [ ] Attached, Document ID: _____ [ ] Not Applicable [X] Waiver Requested
2. Compliance Test Report [ ] Attached, Document ID: _____ [ ] Not Applicable [X] Previously submitted, Date: <u>9/19/2008</u>
3. Procedures for Startup and Shutdown [ ] Attached, Document ID: _____ [ ] Not Applicable [ X] Waiver Requested
4. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [ ] Not Applicable [X] Waiver Requested
5. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [ ] Not Applicable

**Emissions Unit Comment**

No changes to current permit requested.
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**III. EMISSIONS UNIT INFORMATION**

A separate Emissions Unit Information Section (including subsections A through G as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

**A. GENERAL EMISSIONS UNIT INFORMATION**

**Emissions Unit Description and Status**

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</p> <p><input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.</p>		
<p>2. Description of Emissions Unit Addressed in This Section (limit to 60 characters):</p> <p><b>RAP crusher and screen conveyor subject to NSPS Subpart OOO and diesel engines for RAP crushing equipment</b></p>		
<p>3. Emissions Unit Identification Number: <input type="checkbox"/> No ID</p> <p>ID: <b>002 (assumed new ID)</b> <input type="checkbox"/> ID Unknown</p>		
<p>4. Emissions Unit Status Code: <b>A</b></p>	<p>5. Initial Startup Date: <b>2002 (per -001-AC and 002-AO)</b></p>	<p>6. Emissions Unit Major Group SIC Code: <b>29</b></p>
<p>7. Emissions Unit Comment: (Limit to 500 Characters)</p> <p><b>The unit is intended to be used periodically for supplying RAP to the asphalt mix. The unit can consist of any air general permitted RAP crushing system.</b></p> <p><b>Some portable crusher engines maybe subject to NSPS subpart IIII. If applicable engines must comply.</b></p>		

**Emissions Unit Control Equipment**

1. Control Equipment/Method Description (limit to 200 characters per device or method):

N/A

2. Control Device or Method Code(s):

**Emissions Unit Details**

1. Package Unit:

Manufacturer:

Model Number:

2. Generator Nameplate Rating: MW

3. Incinerator Information:

Dwell Temperature: °F

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Heat Input Rate: N/A

2. Maximum Incineration Rate: N/A lb/hr

3. Maximum Process or Throughput Rate: **200 tph and 200,000 tpy**

4. Maximum Production Rate:

5. Requested Maximum Operating Schedule:

24 hours/day 7 days/week

52 weeks/year 8760 hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

**B. EMISSION POINT (STACK/VENT) INFORMATION**

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram? <b>Portable</b>		2. Emission Point Type Code: <b>3</b>	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): <b>This unit includes a RAP crusher, and screening and conveying equipment.</b>			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: <b>NA</b>			
5. Discharge Type Code: <b>F</b>	6. Stack Height: <b>N/A</b> feet	7. Exit Diameter: <b>N/A</b> feet	
8. Exit Temperature: <b>ambient</b> °F	9. Actual Volumetric Flow Rate: <b>N/A</b> acfm	10. Water Vapor: <b>N/A</b> %	
11. Maximum Dry Standard Flow Rate: <b>N/A</b> dscfm		12. Nonstack Emission Point Height: <b>NA</b> feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):			
14. Emission Point Comment (limit to 200 characters): <b>Emissions points defined in each crusher AG permit</b>			

**C. SEGMENT (PROCESS/FUEL) INFORMATION**

**Segment Description and Rate:** Segment  1  of  2

1. Segment Description (Process/Fuel Type) (limit to 500 characters):  <b>Mineral Products: Stone Quarry/Processing: Primary Crushing</b>		
2. Source Classification Code (SCC): <b>3-05-020-01</b>		3. SCC Units: <b>Tons Processed</b>
4. Maximum Hourly Rate: <b>200</b>	5. Maximum Annual Rate: <b>200,000</b>	6. Estimated Annual Activity Factor: <b>NA</b>
7. Maximum % Sulfur: <b>NA</b>	8. Maximum % Ash: <b>NA</b>	9. Million Btu per SCC Unit: <b>NA</b>
10. Segment Comment (limit to 200 characters): <b>Annual rate is 40 percent of current facility-wide 500,000-ton annual asphalt production limit.</b>		

**Segment Description and Rate:** Segment  2  of  2

1. Segment Description (Process/Fuel Type) (limit to 500 characters):  <b>Internal Combustion Engines: Industrial Diesel: Reciprocating</b>		
2. Source Classification Code (SCC): <b>2-02-001-02</b>		3. SCC Units: <b>Thousand gallons burned (TGB)</b>
4. Maximum Hourly Rate: <b>0.0310</b>	5. Maximum Annual Rate: <b>50.77</b>	6. Estimated Annual Activity Factor: <b>NA</b>
7. Maximum % Sulfur: <b>0.5</b>	8. Maximum % Ash: <b>NA</b>	9. Million Btu per SCC Unit: <b>137 mmBtu/TGB</b>
10. Segment Comment (limit to 200 characters): <b>The fuel usage is based on twice the size of a large RAP crushing unit: Caterpillar C18 engine (735 HP) + 100 HP to run screens and conveyors = 835 HP Crusher operation for C18 engine = 200 tons of RAP per hour 137,000 Btu/gal (AP-42 App. A), diesel fuel</b>  <b>Maximum energy use rates: (835 HP) x 2545 Btu per hr/HP = 2,125,075 Btu/hr = 2.125 MMBtu/hr 2.125 mmbtu/hr x 2 (conservative assumption) = 4.25 mmbtu/hr 4.25 mmbtu/hr x 1000gal/137 mmbtu = 0.03102 1000gal/hr = 31.02 gal/hr</b>  <b>31.02 gal/200 ton=0.155 gal/ton 0.155 gal/ton x 200,000 tons/yr = 31,000 gal/yr = 31.0 TGB Use original annual usage of 2002 application 50.77 TGB</b>		

**D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**

**Potential Emissions**

1. Pollutant Emitted: <b>PM</b>		2. Pollutant Regulatory Code: <b>EL</b>	
3. Primary Control Device Code: <b>NA</b>	4. Secondary Control Device Code: <b>NA</b>		5. Total Percent Efficiency of Control:
6. Potential Emissions: <b>6.0 lb/hour                      3.4 tons/year</b>			7. Synthetically Limited? [ <b>X</b> ]
8. Emission Factor: <b>see below</b> Reference: <b>see below</b>			9. Emissions Method Code: <b>3B</b>
10. Calculation of Emissions (limit to 600 characters): <b>See Attachment A</b>			
11. Pollutant Potential Emissions Comment (limit to 200 characters):			

**Allowable Emissions** Allowable Emissions \_\_\_\_\_ of \_\_\_\_\_

1. Basis for Allowable Emissions Code: <b>NA</b>		2. Future Effective Date of Allowable Emissions: <b>NA</b>	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour                      tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

**D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**

**Potential Emissions**

1. Pollutant Emitted: <b>PM10</b>		2. Pollutant Regulatory Code: <b>NS</b>	
3. Primary Control Device Code: <b>016</b>	4. Secondary Control Device Code: <b>NA</b>	5. Total Percent Efficiency of Control:	
6. Potential Emissions: <b>4.2 lb/hour                      2.4 tons/year</b>		7. Synthetically Limited? [ <b>X</b> ]	
8. Emission Factor: <b>see below</b>  Reference: <b>see below</b>		9. Emissions Method Code: <b>3B</b>	
10. Calculation of Emissions (limit to 600 characters): <b>See Attachment A</b>			
11. Pollutant Potential Emissions Comment (limit to 200 characters):			

**Allowable Emissions** Allowable Emissions \_\_\_\_\_ of \_\_\_\_\_

1. Basis for Allowable Emissions Code: <b>NA</b>	2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:  lb/hour                      tons/year		
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			





**D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**

**Potential Emissions**

1. Pollutant Emitted: <b>NOx</b>		2. Pollutant Regulatory Code: <b>NS</b>	
3. Primary Control Device Code: <b>NA</b>	4. Secondary Control Device Code: <b>NA</b>	5. Total Percent Efficiency of Control:	
6. Potential Emissions: <b>18.74 lb/hour</b> <b>15.34 tons/year</b>		7. Synthetically Limited? [ <b>X</b> ]	
8. Emission Factor: <b>4.41 lb/MMBtu</b> Reference: <b>AP-42, Table 3.3-1</b>		9. Emissions Method Code: <b>3B</b>	
10. Calculation of Emissions (limit to 600 characters):  <b>See Attachment A</b>			
11. Pollutant Potential Emissions Comment (limit to 200 characters):			

**Allowable Emissions** Allowable Emissions \_\_\_\_\_ of \_\_\_\_\_

1. Basis for Allowable Emissions Code: <b>NA</b>	2. Future Effective Date of Allowable Emissions: <b>NA</b>
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	







**G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION**

**Supplemental Requirements**

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u> B </u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment:

# ATTACHMENT A

## Facility Emissions

**C. W. Roberts Contracting, Inc.  
Wildwood, Sumter County, Florida**

Attachment A: June 2009

**Potential Emissions Calculations  
Counterflow Drum Mix Asphalt Plant**

Facility-wide limits: 1.2 mmgal/yr of fuel burned  
500,000 tn/yr of the sum of asphalt produced and RAP crushed  
RAP crushed portion limited to 200,000 tn/yr

application year	Asphalt Plant		Asphalt Plant +Crushing		Asphalt Plant		Asphalt Plant +Crushing		Asphalt Plant		Asphalt Plant +Crushing	
	PM		SO2		NOx		CO		VOC			
	ton/yr		ton/yr		ton/yr		ton/yr		ton/yr			
2002	8.2	6.1	59.95	59.95	13.8	29.1	32.5	35.8	8.0	9.3		
2009	12.4	11.7	59.95	36.98	13.8	23.6	33.1	23.4	8.0	6.1		
column numbers	1	2	3	4	5	6	7	8	9	10		

column notes

- 1- PM- 2009 emissions higher for asphalt plant due to inclusion of more fugitive emissions
- 2- PM- 2009 emissions higher for asphalt plant + crushing due to inclusion of more fugitive emissions
- 3- SO2 -same emissions
- 4- SO2- 2002 emissions calculation assumed all SO2 emissions based on fuel burned for asphalt production
- 5- NOx- same emissions
- 7- CO- 2002 emissions did not account for fugitive CO from silos
- 9- VOC- same emissions

6, 8, and 10- NOx,CO,VOC- Total facility asphalt and crushing limited to 500,000 tn/yr. 2002 emissions did not account for reduction of asphalt production (total 300,000 tn/yr) when crusher operated at capacity (200,000 tn/yr). 2009 emissions does account.



TABLE PM  
C. W. Roberts Contracting, Inc.  
Wildwood, Sumter County, Florida

Attachment A June 2009

Potential Emissions Calculations  
Counterflow Drum Mix Asphalt Plant

ASPHALT PLANT ONLY

Particulate Matter (PM)

Assumed Fugitive Emission Points	Emission Factor	Process Rate	PM Potential Emissions
<b>TOTAL PM:</b>			<b>15.46 lb/hr</b>
<b>TOTAL PM10: (8)</b>			<b>8.57</b>
<b>RAP Feed System (EU001) (assume RAP not crushed on-site)</b>			
1-01	0.00014 lb/ton (1)	160 TPH	0.02 lb/hr
1-02	0.00014 lb/ton (1)	160 TPH	0.02 lb/hr
1-03	0.00014 lb/ton (1)	160 TPH	0.02 lb/hr
1-04	0.00360 lb/ton (1)	160 TPH	0.58 lb/hr
1-05	0.00014 lb/ton (1)	160 TPH	0.02 lb/hr
1-06	0.00014 lb/ton (1)	160 TPH	0.02 lb/hr
<b>TOTAL PM:</b>			<b>0.69 lb/hr</b>
* assume 10% of 200 tph and 200,000 tpy is screened to a pile			
<b>Drum Mix Asphalt Plant (EU001)</b>			
4-01 to 4-06	0.00014 lb/ton (1)	400 TPH	0.06 lb/hr
4-07 to 4-12	0.00014 lb/ton (1)	400 TPH	0.06 lb/hr
4-13	0.00014 lb/ton (1)	400 TPH	0.06 lb/hr
4-14	0.00360 lb/ton (1)	400 TPH	1.44 lb/hr
4-15	0.00014 lb/ton (1)	400 TPH	0.06 lb/hr
4-16	0.00014 lb/ton (1)	400 TPH	0.06 lb/hr
4-17	0.04 g/dscf	38070 dscfm	13.05 lb/hr
4-21	5.8882 lb/day/acre (4)	NA	730 acres-day/yr (6)
<b>TOTAL PM:</b>			<b>14.77 lb/hr</b>
<b>TOTAL PM (EU001)</b>			<b>15.46 lb/hr</b>
<b>Portable RAP Crushing System (EU002)</b>			
2-01	0.00014 lb/ton (1)	0 TPH	0.00 lb/hr
2-02	0.00014 lb/ton (1)	0 TPH	0.00 lb/hr
2-03	0.00360 lb/ton (1)	0 TPH	0.00 lb/hr
2-04	0.00014 lb/ton (1)	0 TPH	0.00 lb/hr
2-05	0.00014 lb/ton (1)	0 TPH	0.00 lb/hr
2-06	0.0012 lb/ton (5)	0 TPH	0.00 lb/hr
2-07	0.00014 lb/ton (1)	0 TPH	0.00 lb/hr
2-08	0.00014 lb/ton (1)	0 TPH	0.00 lb/hr
2-09	0.00014 lb/ton (1)	0 TPH	0.00 lb/hr
2-10	0.00014 lb/ton (1)	0 TPH	0.00 lb/hr
2-11	0.00014 lb/ton (1)	0 TPH	0.00 lb/hr
2-12	0.00014 lb/ton (1)	0 TPH	0.00 lb/hr
Sum =			0.00 lb/hr
2 x Sum (10) =			0.00 lb/hr
<b>Portable RAP Crushing Engine (EU002)</b>			
3-01	0.31 lb/mmbtu	0 mmbtu/hr	0.00 lb/hr
<b>TOTAL PM:</b>			<b>0.0 lb/hr</b>

- (1) Emission Factor based on AP-42, Table 11.19.2-2 tertiary crushing controlled by water spray
- (2) FYI- totally enclosed drop point with baghouse fan suction
- (3) Emission Factor based on AP-42, Table 11.1-14 Assume V = -0.05 and T = 325F
- (4) Emission Factor based on EPA's Technical Report Data, Control of Open Fugitive Dust Sources, EPA-450/3-88-008, p. 4-17 Assumes s = 19%, p = 110 days, f = 13.3%
- (5) Emiss Factor 0.00059 (PM10) x 2.1 = 0.0012 lb/ton, AP-42, Table 11.19.2-2
- (6) Based on the assumption that the total pile area of 2 acres and the pile(s) are continuously active for 365 days per year
- (7) Emissions based on the product of the emission factor, total pile area, and days the pile(s) are continuously active
- (8) Conservatively assume PM10 = 0.7 PM Baghouse controlled drum mix (AP-42, 11.1-3) PM10/PM = 0.023/0.033 Whereas, uncontrolled or less controlled sources will have less wt fraction of PM10/PM
- (9) AP-42, Table 3.3-1
- (10) Conservatively assume that twice the expected number of pieces of equipment of a RAP crusher are on site

TABLE PM  
C. W. Roberts Contracting, Inc.  
Wildwood, Sumter County, Florida

Attachment A: June 2009

Potential Emissions Calculations  
Counterflow Drum Mix Asphalt Plant

ASPHALT PLANT AND RAP CRUSHER

Particulate Matter (PM)

Assumed Fugitive Emission Points	Emission Factor	Process Rate		PM Potential Emissions		
				lb/hr	TPY	
<b>TOTAL PM:</b>				21.80	11.67	
<b>TOTAL PM10: (8)</b>				15.26	8.17	
<b>RAP Feed System (EU001)</b>						
1-01	Front End Loader to Portable Recycle System Hopper	0.00014 lb/ton (1)	160 TPH	200,000 TPY	0.02 lb/hr	0.0 TPY
1-02	Portable Recycle System Hopper to Underhopper Conveyor Belt	0.00014 lb/ton (1)	160 TPH	200,000 TPY	0.02 lb/hr	0.0 TPY
1-03	Underhopper Conveyor Belt to 4x8 Screen	0.00014 lb/ton (1)	160 TPH	200,000 TPY	0.02 lb/hr	0.0 TPY
1-04	4x8 Screen	0.00360 lb/ton (1)	160 TPH	200,000 TPY	0.58 lb/hr	0.4 TPY
1-05	4x8 Screen to Drum Mix Plant Feeder Conveyor Belt	0.00014 lb/ton (1)	160 TPH	200,000 TPY	0.02 lb/hr	0.0 TPY
1-06	Drum Mix Plant Feeder Conveyor Belt to Drum Mix Plant	0.00014 lb/ton (1)	160 TPH	200,000 TPY	0.02 lb/hr	0.0 TPY
<b>TOTAL PM:</b>				0.69	0.43	
* assume 10% of 200 tph and 200,000 tpy is screened to a pile						
<b>Drum Mix Asphalt Plant (EU001)</b>						
4-01 to 4-06	Front End Loader to Cold Feed Storage Bin 1-6	0.00014 lb/ton (1)	400 TPH	300,000 TPY	0.06 lb/hr	0.0 TPY
4-07 to 4-12	Cold Feed Storage Bin 1-6 to Conveyor	0.00014 lb/ton (1)	400 TPH	300,000 TPY	0.06 lb/hr	0.0 TPY
4-13	Conveyor to 5x12 Single Deck Screen	0.00014 lb/ton (1)	400 TPH	300,000 TPY	0.06 lb/hr	0.0 TPY
4-14	5x12 Single Deck Screen	0.00360 lb/ton (1)	400 TPH	300,000 TPY	1.44 lb/hr	0.5 TPY
4-15	5x12 Single Deck Screen to SC-3050 Conveyor Belt	0.00014 lb/ton (1)	400 TPH	300,000 TPY	0.06 lb/hr	0.0 TPY
4-16	SC-3050 Conveyor Belt to Drum Mix Plant	0.00014 lb/ton (1)	400 TPH	300,000 TPY	0.06 lb/hr	0.0 TPY
4-17	Drum Mix Plant (vented to Baghouse)	0.04 gr/dscf	39000 dscfm	300,000 TPY	13.37 lb/hr	5.01 TPY
4-21	Raw Material Storage Piles	5.8882 lb/day/acre (4)	NA	730 acres-day/yr (6)	N/A	2.1 TPY (7)
<b>TOTAL PM:</b>				15.09	7.8	
<b>TOTAL PM (EU001)</b>				15.78	8.24	
<b>Portable RAP Crushing System (EU002)</b>						
2-01	Front End Loader to Hopper	0.00014 lb/ton (1)	200 TPH	200,000 TPY	0.03 lb/hr	0.0 TPY
2-02	hopper to screening	0.00014 lb/ton (1)	200 TPH	200,000 TPY	0.03 lb/hr	0.0 TPY
2-03	Screening	0.00360 lb/ton (1)	200 TPH	200,000 TPY	0.72 lb/hr	0.4 TPY
2-04	Screening to Oversize Belt	0.00014 lb/ton (1)	180 TPH	180,000 TPY	0.03 lb/hr	0.0 TPY
2-05	Oversize Belt to Crusher	0.00014 lb/ton (1)	180 TPH	180,000 TPY	0.03 lb/hr	0.0 TPY
2-06	Crusher	0.0012 lb/ton (5)	180 TPH	180,000 TPY	0.22 lb/hr	0.1 TPY
2-07	Crusher to Crusher Return Belt	0.00014 lb/ton (1)	180 TPH	180,000 TPY	0.03 lb/hr	0.0 TPY
2-08	Crusher Return Belt to Underscreen Belt	0.00014 lb/ton (1)	200 TPH	200,000 TPY	0.03 lb/hr	0.0 TPY
2-09	Screening to Underscreen Belt	0.00014 lb/ton (1)	20 TPH	20,000 TPY	0.00 lb/hr	0.0 TPY
2-10	Underscreen Belt to Short Belt	0.00014 lb/ton (1)	200 TPH	200,000 TPY	0.03 lb/hr	0.0 TPY
2-11	Short Belt to Stacker Belt	0.00014 lb/ton (1)	200 TPH	200,000 TPY	0.03 lb/hr	0.0 TPY
2-12	Stacker Belt to Storage Pile	0.00014 lb/ton (1)	200 TPH	200,000 TPY	0.03 lb/hr	0.0 TPY
				Sum =	1.18	0.59
				2 x Sum (10) =	2.36	1.18
<b>Portable RAP Crushing Engine (EU002)</b>						
3-01	Engine Exhaust (9)	0.31 lb/mmbtu	4.25 mmbtu/hr	6955.49 mmbtu/yr	1.32 lb/hr	1.08 TPY
<b>TOTAL PM:</b>				6.0	3.4	
<b>TOTAL PM10 (8):</b>				4.2	2.4	

- (1) Emission Factor based on AP-42, Table 11.19.2-2 tertiary crushing controlled by water spray
- (2) FYI- totally enclosed drop point with baghouse fan suction
- (3) Emission Factor based on AP-42, Table 11.1-14 Assume V = -0.05 and T = 325F
- (4) Emission Factor based on EPA's Technical Report Data, Control of Open Fugitive Dust Sources, EPA-450/3-88-008, p. 4-17 Assumes s = 19%, p = 110 days, f = 13.3%
- (5) Emiss Factor 0.00059 (PM10) x 2.1 = 0.0012 lb/ton, AP-42, Table 11.19.2-2
- (6) Based on the assumption that the total pile area of 2 acres and the pile(s) are continuously active for 365 days per year
- (7) Emissions based on the product of the emission factor, total pile area, and days the pile(s) are continuously active
- (8) Conservatively assume PM10 = 0.7 PM Baghouse controlled drum mix (AP-42, 11.1-3) PM10/PM = 0.023/0.033 Whereas, uncontrolled or less controlled sources will have less wt fraction of PM10/PM
- (9) AP-42, Table 3.3-1 6955.49 mmbtu/yr based on 50.77 gal/yr @ 137 mmbtu/1000gal
- (10) Conservatively assume that twice the expected number of pieces of equipment of a RAP crusher are on site

TABLE SO2  
 C. W. Roberts Contracting, Inc.  
 Wildwood, Sumter County, Florida

Attachment A, June 2009

Potential Emissions Calculations  
 Counterflow Drum Mix Asphalt Plant

ASPHALT PLANT ONLY

Sulfur Dioxide (SO <sub>2</sub> )		Emission Factor		Process Rate		Potential Emissions	
Emission Point							
Drum Mix Plant (EU001)	0.2398 lb SO <sub>2</sub> /ton		400 ton/hr	300,000 tons/yr		95.92 lb/hr	59.95 TPY
<b>TOTAL SO<sub>2</sub></b>						<b>95.92 lb/hr</b>	<b>59.95 TPY</b>

(1) From 2002 application: 12.10<sup>6</sup> gal/yr / 500,000 ton/yr = 2.4 gal/ton asphalt  
 SO<sub>2</sub> per ton asphalt: 2.4 gal/ton x 7.08 lb/gal (AP42AppA) x 0.01 S x 2 SO<sub>2</sub>/S = 0.3398 lb SO<sub>2</sub>/ton asphalt  
 AP-42, Table 11.1-7 allows reduction factor of SO<sub>2</sub> by 0.1 lb/ton = 0.3398 - 0.1 = 0.2398 lb SO<sub>2</sub>/ton asphalt

RAP CRUSHER AND ASPHALT PLANT

Sulfur Dioxide (SO <sub>2</sub> )		Emission Factor		Process Rate		Potential Emissions	
Emission Point							
Drum Mix Plant (EU001)	0.2398 lb SO <sub>2</sub> /ton		400 ton/hr	300,000 tons/yr		95.92 lb/hr	59.95 TPY
asphalt plant production = 500,000 ton/yr minus 200,000 RAP crusher							
		<b>Emission Factor (1) (2)</b>		<b>Capacity</b>		<b>Potential Emissions</b>	
Engine Exhaust (EU 002)	0.29 lb/mmbtu	4.25 mmbtu/hr(3)	0.0310 1000gal/hr	200 ton/RAP/hr	0.00155 1000gal/ton	200,000 ton/RAP/yr	31.02 1000gal/yr
					50.77 1000gal/yr	6955.49 mmbtu/yr	
	0.29 lb/mmbtu	4.25 mmbtu/hr(3)				use higher annual fuel usage from 2002 application of 50,777 TGB	
						6955.49 mmbtu/yr	1.23 lb/hr
							1.01 TPY
<b>TOTAL SO<sub>2</sub></b>						<b>97.15 lb/hr</b>	<b>56.98 TPY</b>

(1) Emission Factor based on AP-42, Table 1.3-1  
 (2) 157 x S, S = assume Fuel Sulfur Content is 0.5%  
 (3) see application, conservatively assume twice the largest HP (835 HP) expected for potential emissions

TABLE NOx  
 C. W. Roberts Contracting, Inc  
 Wildwood, Sumter County, Florida

Attachment A. June 2009

Potential Emissions Calculations  
 Counterflow Drum Mix Asphalt Plant

ASPHALT PLANT ONLY

Nitrogen Oxides (NOx)		Process Rate		Potential Emissions	
Emission Point	Emission Factor				
Drum Mix Plant (EU001)	0.055 lb/ton	400 ton/hr	500000 tons/yr	22.00 lb/hr	13.8 TPY
<b>TOTAL NOx:</b>				<b>22.0</b> lb/hr	<b>13.8</b> TPY

(1) Emission Factor based on AP-42, Table 11.1-7

RAP CRUSHER AND ASPHALT PLANT

Nitrogen Oxides (NOx)		Process Rate		Potential Emissions	
Emission Point	Emission Factor				
Drum Mix Plant (EU001)	0.055 lb/ton	400 ton/hr	300000 tons/yr	22.00 lb/hr	8.3 TPY
asphalt plant production = 500,000 ton/yr minus 200,000 RAP crusher					
		Capacity		Potential Emissions	
Engine Exhaust (EU 002)	4.41 lb/mmbtu	4.25 mmbtu/hr(3)	0.0310 1000gal/hr	200 tonRAP/hr	0.000155 1000gal/ton
				200000 tonRAP/yr	31.02 1000gal/yr
				50.77 1000gal/yr	6955.49 mmbtu/yr
				* use higher annual fuel usage from 2002 application of 50.77 TGB	
	4.41 lb/mmbtu	4.25 mmbtu/hr(3)		6955.49 mmbtu/yr	18.74 lb/hr
					15.34 TPY
<b>TOTAL NOx:</b>				<b>40.74</b> lb/hr	<b>23.59</b> TPY

(1) Emission Factor based on AP-42, Table 3.3-1, Diesel Fuel Oil (137 mmbtu/1000gal)

(3) see application, conservatively assume twice the largest HP (835 HP) expected for potential emissions. NOTE: 2007 or newer engines, per NSPS subpart IIII Table 1 NOx at 6.9 gr/HP-hr = 2.17 lb/mmbtu

TABLE CO  
C. W. Roberts Contracting, Inc  
Wildwood, Sumter County, Florida

Attachment A June 2009

Potential Emissions Calculations  
Counterflow Drum Mix Asphalt Plant

ASPHALT PLANT ONLY

Carbon Monoxide (CO)									
Emission Point	Emission Factor			Process Rate				Potential Emissions	
Drum Mix Plant	0.13 lb/ton (1)		400 ton/hr		500000 ton/yr			52.0	32.50
Silo Filling	0.00117998 lb/ton (2)		400 ton/hr		500000 ton/yr			0.5	0.29
Silo Load Out	0.00134924 lb/ton (2)		400 ton/hr		500000 ton/yr			0.5 lb/hr	0.34 TPY
(1) Emission Factor based on AP-42, Table 11.1-7									
(2) Emission Factor based on AP-42, Table 11.1-14 Assume V = -0.05 and T = 325F									
<b>TOTAL CO.</b>								<b>53.0</b> lb/hr	<b>33.1</b> TPY

RAP CRUSHER AND ASPHALT PLANT

Carbon Monoxide (CO)										
Emission Point	Emission Factor			Process Rate				Potential Emissions		
Drum Mix Plant	0.13 lb/ton (1)		400 ton/hr		300000 ton/yr			52.0	19.50	
Silo Filling	0.00117998 lb/ton (2)		400 ton/hr		500000 ton/yr			0.5	0.29	
Silo Load Out	0.00134924 lb/ton (2)		400 ton/hr		500000 ton/yr			0.5 lb/hr	0.34 TPY	
(1) Emission Factor based on AP-42, Table 11.1-7										
(2) Emission Factor based on AP-42, Table 11.1-14 Assume V = -0.05 and T = 325F										
<b>TOTAL CO.</b>								<b>53.0</b> lb/hr	<b>20.1</b> TPY	
<i>asphalt plant tonnage = 500,000 minus RAP crusher</i>										
								Potential Emissions		
Engine Exhaust (EU 002)	Emission Factor (1)			Capacity						
	0.95 lb/mmbtu	4.25 mmbtu/hr(3)	0.0310 1000gal/hr	200 tonRAP/hr	0.000155 1000gal/ton	200000 tonRAP/yr	31.02 1000gal/yr	50.77 1000gal/yr	6955.49 mmbtu/yr	
								use higher annual fuel usage from 2002 application of 50 777 TGB		
								6955.49 mmbtu/yr	4.04 lb/hr	3.30 TPY
(1) Emission Factor based on AP-42, Table 3.3-1, Diesel Fuel Oil (137 mmbtu/1000gal)										
(3) see application, conservatively assume twice the largest HP (835 HP) expected for potential emissions										
<b>TOTAL CO.</b>								<b>57.05</b> lb/hr	<b>23.44</b> TPY	

TABLE VOC  
 C W Roberts Contracting, Inc  
 Wildwood, Sumter County, Florida

Attachment A June 2009

Potential Emissions Calculations  
 Counterflow Drum Mix Asphalt Plant

ASPHALT PLANT ONLY

Volatile Organic Compounds (VOC)				Process Rate		Potential Emissions	
Emission Point	Emission Factor						
Drum Mix Plant (EU001)	0.032 lb/ton (1)		400 ton/hr		500000 ton/yr	12.80	8.0 TPY
<b>TOTAL NOx</b>						<b>12.8</b>	<b>8.0 TPY</b>

RAP CRUSHER AND ASPHALT PLANT

Volatile Organic Compounds (VOC)				Process Rate		Potential Emissions	
Emission Point	Emission Factor						
Drum Mix Plant (EU001)	0.032 lb/ton (1)		400 ton/hr		300000 ton/yr	12.80	4.8 TPY
asphalt plant = 500000 tons minus RAP crusher							
				Capacity		Potential Emissions	
Engine Exhaust (EU 002)	0.36 lb/mmbtu (2)	4.25 mmbtu/hr(3)	0.0310 1000gal/hr	200 tonRAP/hr	0.000155 1000gal/ton	200000 tonRAP/yr	31.02 1000gal/yr
						50.77 1000gal/yr	6955.49 mmbtu/yr
						use higher annual fuel usage from 2002 application of 50.77 TGB	
	0.36 lb/mmbtu	4.25 mmbtu/hr(3)				6955.49 mmbtu/yr	1.53 lb/hr 1.25 TPY
<b>TOTAL NOx</b>						<b>14.33</b>	<b>6.05 TPY</b>

(1) Emission Factor based on AP-42, Table 11.1-8

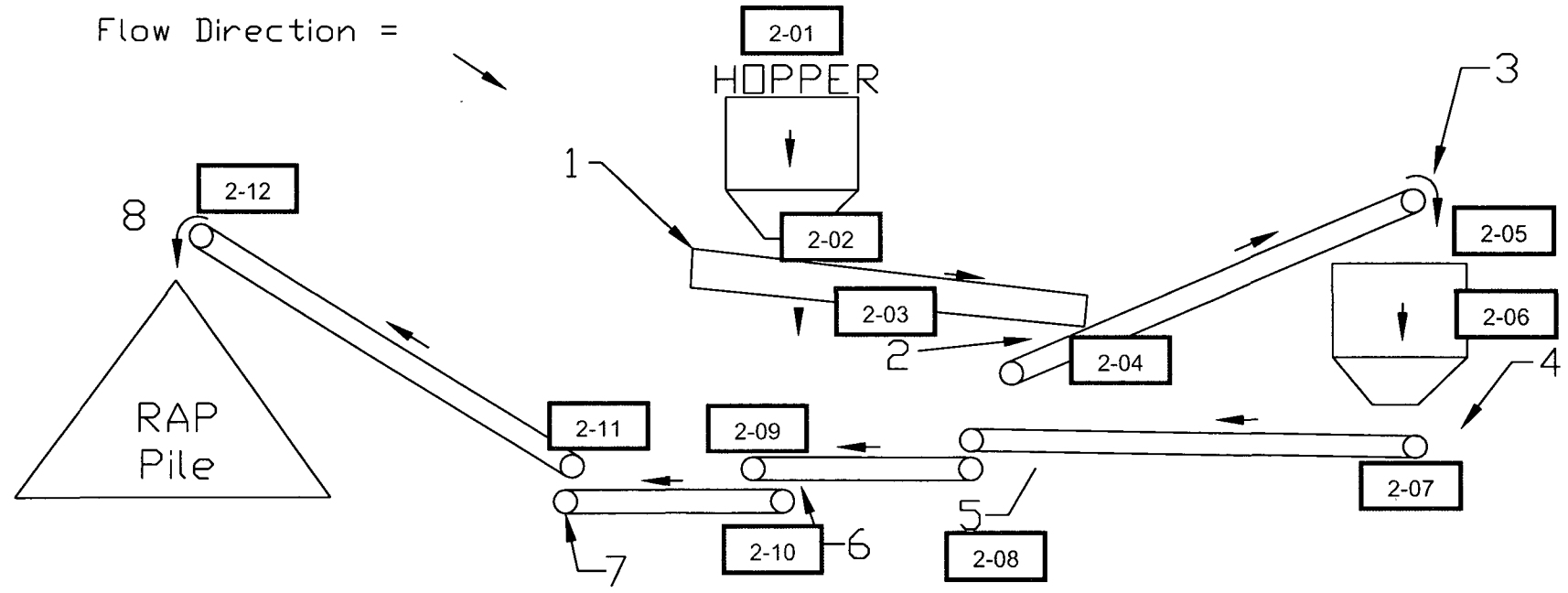
(2) Emission Factor based on AP-42, Table 3.3-1, Diesel Fuel Oil (137 mmbtu/1000gal)

(3) see application, conservatively assume twice the largest HP (835 HP) expected for potential emissions

# ATTACHMENT B

## General Process Diagram for RAP Crusher

Emission Points	Percent of Thruput
1) hopper to screen	100
2) screen to conveyor	90
3) oversize belt conveyor to crusher	90
4) crusher to conveyor	90
5) conveyor to underscreen conveyor	90
6) underscreen belt to short belt conveyor	100
7) short belt conveyor to stacker belt conveyor	100
8) stacker belt conveyor to pile	100



C.W. ROBERTS CONTRACTING, INC.  
 RAP CRUSHER  
 PLANT #7  
 HILLSBOROUGH COUNTY

RAP CRUSHER SYSTEM  
 FLOW DIAGRAM





ATTACHMENT 2

SPECIFIC CONDITION NO. 39, OF OPERATION PERMIT 7775175-002-AO

MONTHLY DATA: JUNE-DECEMBER, 2008

date	daily	monthly	12-month	daily	monthly	12-month	daily	incoming	monthly	12-month	daily	monthly	12-month	RAP crush	monthly	12-month	RAP crush	monthly	12-month	daily	monthly	12-month		
	tons	asphalt production tons	tons	hours	asphalt operation hours	hours	ton/hr	fuel loads gallons	asphalt fuel usage tons	tons	ton/hr	production tons	production tons	production tons	operation hours	operation hours	operation hours	operation hours	operation hours	operation hours	RAP crush fuel usage gallons	RAP crush fuel usage tons	RAP crush fuel usage tons	
8/12/2008		27190	97799		125 27	390240								0	10855	10855	0	82	0			707 5	707 5	
8/2/2008	1504			6 68										0										
8/3/2008	1911			8 49				4939						0										
8/4/2008	1540			8 84										0										
8/5/2008	1446			6 43				5383						0										
8/6/2008	8			0 04										0										
8/7/2008														0										
8/8/2008														0										
8/9/2008	539			3 37				3741						0										
8/10/2008	1520			6 78										0										
8/11/2008	2940			13 07				4911						0										
8/12/2008	1589			7 08										0										
8/13/2008	1090			4 8				5508						0										
8/14/2008														0										
8/15/2008														0										
8/16/2008	937			4 10										0										
8/17/2008	1245			7 76				4888						0										
8/18/2008	1688			8 39										0										
8/19/2008	1585			6 96				4984						0										
8/20/2008	696			4 35										0										
8/21/2008														0										
8/22/2008														0										
8/23/2008	1250			5 58				4845						0										
8/24/2008	2218			9 88										0										
8/25/2008	639			3 98				6110						0										
8/26/2008	1606			7 14										0										
8/27/2008	571			3 57										0										
8/28/2008														0										
8/29/2008														0										
8/30/2008														0										
8/31/2008														0										
7/1/2008		21343	119142		97 23	509362								1231	9300	20185	12	93	94			80	604 5	1312
7/2/2008														0										
7/3/2008														0										
7/4/2008														0										
7/5/2008														0										
7/6/2008														0										
7/7/2008	403			2 52				4898						0										
7/8/2008	836			3 72										0										
7/9/2008	1476			6 56										0										
7/10/2008	1399			6 22				5951						0										
7/11/2008	45			0 29										0										
7/12/2008														0										
7/13/2008														0										
7/14/2008	913			4 06										0										
7/15/2008	1570			6 98				5988						0										
7/16/2008	887			3 94										0										
7/17/2008	279			1 74										0										
7/18/2008	291			1 82										0										
7/19/2008														0										
7/20/2008														0										
7/21/2008	9			0 05				5833						0										
7/22/2008	285			1 78										0										
7/23/2008	1933			8 59										0										
7/24/2008	1608			7 15										0										
7/25/2008	1175			5 22				4844						0										
7/26/2008														0										
7/27/2008														0										
7/28/2008	1935			8 6										0										
7/29/2008	2067			9 19				5990						0										
7/30/2008	2597			11 54				5970						0										
7/31/2008	1635			7 27										0										
8/1/2008	98	21022	140764	0 61	99 18	650148	161	5991	42469	294469	0	0	20185	0	0	175						0	1312	
8/2/2008														0										
8/3/2008														0										
8/4/2008	1744			7 75										0										
8/5/2008	2225			9 89				6187						0										
8/6/2008	2336			10 38										0										
8/7/2008	1772			7 88				5959						0										
8/8/2008	386			2 41										0										
8/9/2008														0										
8/10/2008														0										
8/11/2008	2814			11 82				5965						0										
8/12/2008	2039			9 08										0										
8/13/2008	547			3 42				5396						0										
8/14/2008	6			0 04										0										
8/15/2008														0										
8/16/2008																								