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October 9, 2009

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093-89508

Mr. Jonathon Holtom, P.E.
Program Administrator, Title V Section
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, FL 32399-2400

BUREAU OF AIR REGULATION

**RE: REQUEST FOR ADDITIONAL INFORMATION
STANTON ENERGY CENTER TITLE V AIR OPERATION PERMIT RENEWAL
PERMIT NO. 0950137-027-AV**

Dear Mr. Holtom:

The Orlando Utilities Commission (OUC) is in receipt of a Request for Additional Information (RAI) from the Florida Department of Environmental Protection with respect to the above-referenced permitting action. Specifically, letters were received from the Department, dated July 14, 2009 and July 17, 2009, indicating that additional information was necessary in order to continue the processing of the Title V renewal permit. The responses are provided below to the two issues raised in the July 14th letter, followed by the issue referenced in the July 17th letter.

1. *Please specify if any of the facility's generators or other emissions units are subject to 40 CFR 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE), 40 CFR 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, or 40 CFR 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines. If applicable,*

- *Please specify how the facility is complying with the applicable subpart(s).*
- *Please provide the following information for each emission unit subject to the referenced subparts: in-service date, cylinder displacement, and rule applicability.*

Response: According to available manufacturer's data for the emergency generator onsite at the Stanton Energy Center, the nominal rating is 2,850 BHP at 750 RPM and 3,400 BHP at 900 RPM. It has 16 cylinders, and a displacement of 645 cubic inches per cylinder. The in-service date was July 1, 1987; therefore, this generator unit is not subject to any of the above-referenced standards. This is the only diesel generator in use at the site.

2. *Attachment SEC-FL-C8, Requested Changes to Current Title V Air Operation Permit, includes additions and modifications to Appendix U-1, List of Unregulated Emissions Units and Activities. Please provide the details of these recommended changes, including analyses of estimated potential to emit air pollutants.*

Response: The modified Appendix U-1, which was included in the initial TV renewal application package, is attached to this response letter for reference. The only additional units requested to be added to this list were the inline insertable dust collector (EU 036) and the natural draft cooling towers (EU 037). The additional suggested revisions consisted of assigning EU ID Nos. to the units already on the list, consistent with the numbers in the permit. Attached are manufacturer's literature on the inline



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insertable dust collector and a table summarizing the estimated emissions from the cooling towers. The literature on the insertable dust collector suggests that, at a minimum, this unit should be moved to the list of insignificant activities and possibly removed as an emission unit altogether, as it has no discernable emission point.

3. *Please provide an updated Acid Rain Phase II NOx Compliance Plan for the two coal-fired steam generators EU Nos. 001 and 002) at the plant. U.S. EPA regulations require that this updated plan be submitted as part of the Title V air operation permit renewal application.*

Response: The required updated Acid Rain Phase II NOx Compliance Plan is attached to this response letter. Please note that the DEP version of this form is not available from the FDEP website. The Department has indicated that, until it is available, they will be accepting EPA's form number 7610-28.

Rule 62-4.050(3), F.A.C., requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department request for additional information of an engineering nature. Therefore, please find attached a signed and sealed P.E. certification that relates to the issues addressed in this response letter. If you should have any additional questions or concerns, please don't hesitate to contact me at (813) 287-1717.

Sincerely,

GOLDER ASSOCIATES INC.



Scott Osbourn, P.E.
Associate and Senior Consultant

cc: David Baez, OUC
Garfield Blair, OUC
Tom Casio, FDEP

Attachments

SO/PP/ev

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: Scott H. Osbourn, Senior Consultant Registration Number: 57557
2. Professional Engineer Mailing Address... Organization/Firm: Golder Associates, Inc. Street Address: 5100 West Lemon Street, Suite 114 City: Tampa State: FL Zip Code: 33609
3. Professional Engineer Telephone Numbers... Telephone: (813) 287-1717 ext. Fax: (813) 287-1716
4. Professional Engineer E-mail Address: sosbourn@golder.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <p>(1) <i>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; and</i></p> <p>(2) <i>To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i></p> <p>(3) <i>If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i></p> <p>(4) <i>If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i></p> <p>(5) <i>If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input checked="" type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i></p> <p>Signature <u><i>Scott H. Osbourn</i></u> Date <u>10/9/09</u></p> <p>(seal)</p>

* Attach any exception to certification statement.



Appendix U-1. List of Unregulated Emissions Units and/or Activities.

Unregulated Emissions Units and Activities. An emissions unit which emits no “emissions-limited pollutant” and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

For those unregulated emissions units subject to the *General Visible Emissions Standard* at Rule 62-296.320(4)(b), F.A.C., then the provisions of Rule 62-210.700, F.A.C., *Excess Emissions*, are available for purposes of compliance.

The below listed emissions units and activities are neither ‘regulated emissions units’ nor ‘exempt emissions units’.

E.U. ID No.	Brief Description of Emissions Units and Activities
-017	Material Handling
-018	Fuel Storage Tanks
-019	0950137001AVWATER Treatment
-020	Unconfined Emissions
*** -021	Surface Coating and Solvent Cleaning
*** -022	General Purpose Engines
*** -023	Helper Cooling Towers
*** -024	Emergency Generators
-027	Mechanical Draft Cooling Towers
-036	Inline Insertable Dust Collector
-037	Natural Draft Cooling Towers

The Mechanical Draft Cooling Tower and Natural Draft Cooling Towers are not subject to NESHAP because a chromium-based chemical treatment is not used.

[0950137-002-AC, Specific Condition 6.]

**2008 NATURAL DRAFT COOLING TOWERS AIR EMISSIONS
STANTON ENERGY CENTER**

Parameter	Typical Values
	EU 037 - Natural Draft
<u>Performance Data</u>	
No. of Cooling Towers	2
Circulating Water Flow Rate (CWFR) (gal/min) ^a	225,000
Hours of Operation	8,760
<u>Emission Data (total for both cells)</u>	
Drift Rate (DR) (percent)	0.00088
Total Dissolved Solids (TDS) Concentration ^b (ppm)	6,000
Solution Drift ^c (SD) (lb/hr)	990.8
PM/PM ₁₀ Drift ^d (lb/hr)	5.9
(ton/yr) one cooling tower	26.0
(ton/yr) two cooling towers	52

^a Provided by OUC.

^b TDS concentration based on Appendix L, document provided by OUC.

^c Includes water and based on circulating water flow rate and drift rate (CWFR x DR x 8.34 lb/gal x 60 min/hr).

^d PM calculated based on total dissolved solids and solution drift (TDS x SD). Assumed PM=PM10 for conservative purposes.

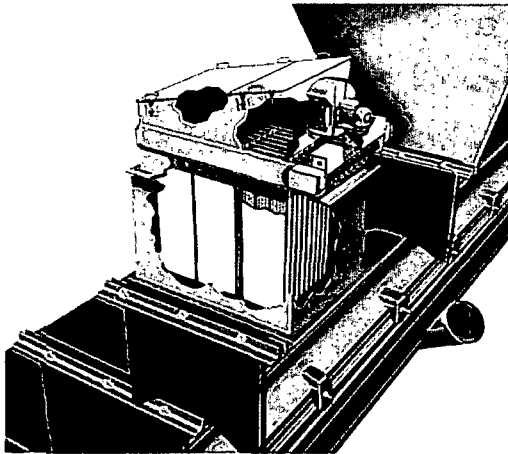
Assumed PM_{2.5}=PM

MARTIN® Insertable Dust Collector



Form No. L3418-6/06

TECHNICAL DATA



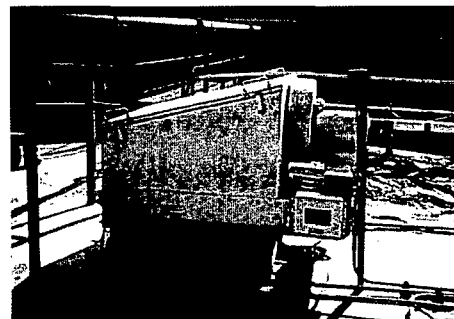
Benefits

- **Effective Dust Capture**
High efficiency filters remove 99.9 percent of all particles larger than one micron.
- **Continuous Operation**
Automatic "reverse jet" cleaning sequence keeps filters working effectively with minimum compressed air.
- **Returns Product To The Process**
Dust stays within the transfer point. Valuable material returns to the material handling system.
- **No Dust Disposal**
No haulage costs for waste disposal. Valuable material returns to the process. No equipment needed to handle, package, or dispose of dust.
- **Economical Installation**
No ductwork to install, balance, or clean.
- **Low Energy Costs**
Small, efficient integral fan operates only when conveyor runs.
- **Compact Design**
Small "footprint" reduces space requirements and installation cost.
- **Minimum Maintenance**
"Clean side" access for inspection and filter changeout.
- **Flexible Design**
Stand-alone system or use to supplement existing central dust collector systems.

To overcome the maintenance problems and operating costs of centralized dust control systems, Martin Engineering recommends the use of insertable dust collectors on conveyor transfer points.

Rather than carry dust-laden air to a central collector, insertable systems filter the air inside the transfer point. There is no large fan, no ductwork, and no central bag house. Insertable filters are integrated into the transfer point enclosure, where they can easily return material to the conveying system.

Insertable collectors can effectively handle the heavy concentrations of dust and high volumes of air arising at belt conveyor transfer points.



Insertable Filter Efficiency

DCE Dalmatic® (MARTIN®) Insertable Dust Collectors are designed to remove 99.9 percent by weight of all dry particulate particles one micron and larger in size.

(This efficiency is based on a time-weighted average and assures the collector will be installed, operated, and maintained in accordance with instructions.)

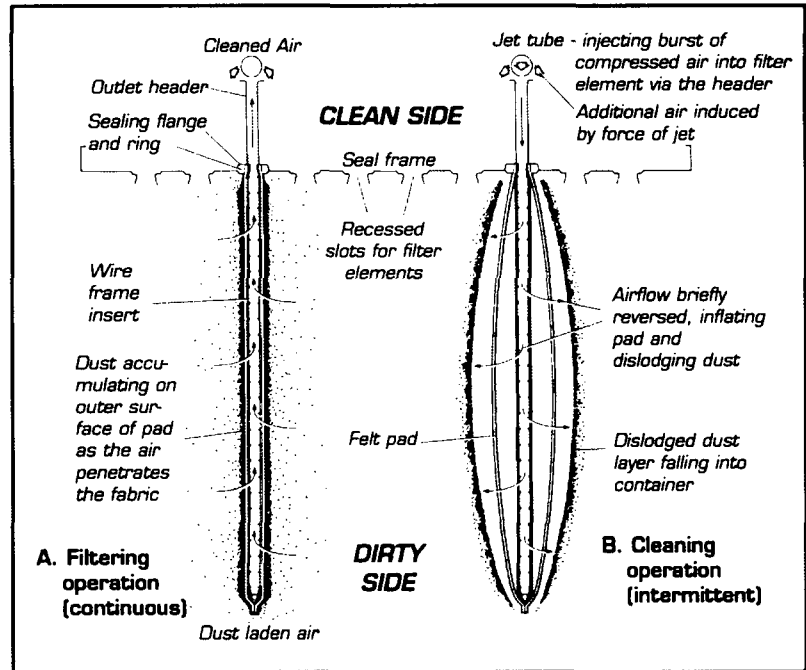
How it Works

An integral fan pulls dust-laden air through the filter elements. The air passes through the filter, leaving the particles on the fabric.

Each filter element is regularly cleaned by a "reverse jet" of compressed air, which is injected into the filter element through the jet tube. This causes a momentary reversal of the air flow, resulting in a brief inflation of the filter element, dislodging the dust cake back into the main material body.

Systems to Fit Your Application

Martin Engineering offers a full range of system sizes and filter materials to match application requirements. Filters can be installed horizontally or vertically to meet application requirements. Explosion-proof packages are available.



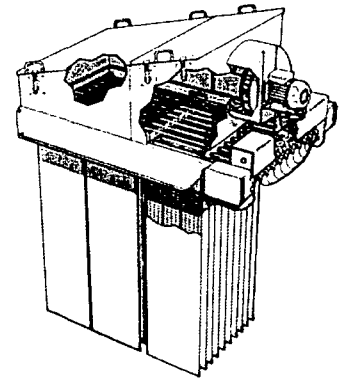
Typical Sizing

Belt Width in. (mm)	Filter Material Required (Filtration Velocity of 7)	Filter Mode Number	MARTIN P/N	P/N Explosion-Proof
24 (500-650)	143 (13.3)	DLM-V14/7F K3	35251	35251-EP
30 (650-800)	179 (16.6)	DLM-V18/15F K5	35256	35256-EP
36 (800-1000)	214 (19.9)	DLM-V20/10F K5	35259	35259-EP
42 (1000-1200)	250 (23.2)	DLM-V21/7F K7	35263	35263-EP
48 (1200-1400)	286 (26.6)	DLM-V30/15F K7	35268	35268-EP
54 (1400-1600)	321 (29.8)	DLM-V30/15F K7	35268	35268-EP
60 (1600-1800)	357 (33.2)	DLM-V30/15F F10	35269	35269-EP
72 (1800-2000)	429 (39.9)	DLM-V45/15F F10	35271	35271-EP

The Insetable Dust Collector sizing shown in the above table is based on generic air flow assumptions. Accurate sizing would require air flow measurements. The best way to measure the air velocity is to use a hand held anemometer. This small electronic device will provide a display of average velocity of the air in feet per minute. By placing the anemometer in the flow of the air as it exits the end of the transfer point chute, the air velocity for the transfer point can be determined. Once the air velocity is determined, the cross sectional area of the

transfer point chute must be measured. This should be recorded in units of feet. Once this area is determined, the area in square feet is multiplied by the air velocity in feet per minute to determine the air volume through the transfer point. Actual size of dust collector may vary, depending on measured air flow, type of material being collected, and material drop height.

Explosion-proof units are supplied with explosion-proof fan motor, spark-resistant fan, NEMA 9 control panel, anti-static filter media, and stainless steel inserts.



QUALITY MANAGEMENT SYSTEM
 CERTIFIED BY DNV
ISO 9001:2000

Form No. L3418-6/06
 © Martin Engineering Company 1998, 2004

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Phase II NO_x Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

This submission is: New Revised

STEP 1
Indicate plant name, State, and ORIS code from NADB, if applicable

Stanton Energy Center Plant Name	FI State	564 ORIS Code
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STEP 2

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DWB" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

ID#	ID#	ID#	ID#	ID#	ID#
1	2				
DWB	DWB				
Type	Type	Type	Type	Type	Type

(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase II dry bottom wall-fired boilers)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Standard annual average emission limitation of 0.55 lb/mmBtu (for cell burner boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Standard annual average emission limitation of 0.85 lb/mmBtu (for cyclone boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) NO _x Averaging Plan (Include NO _x Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(k) Common stack pursuant to 40 CFR 76.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(l) Common stack pursuant to 40 CFR 76.17(a)(2)(i)(B) with NO _x Averaging (check the NO _x Averaging Plan box and include NO _x Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Stanton Energy Center
Plant Name (from Step 1)

STEP 2, cont'd.

1	2				
ID#	ID#	ID#	ID#	ID#	ID#
DWB	DWB				
Type	Type	Type	Type	Type	Type

- | | | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| (m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (p) Repowering extension plan approved or under review | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

STEP 3
Read the standard requirements and certification, enter the name of the designated representative, sign &

Standard Requirements

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

Special Provisions for Early Election Units

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO_x as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(ii).

Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO_x for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO_x for Phase II units with Group 1 boilers under 40 CFR 76.7.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Denise M. Stalls, ADR	
Signature	<i>Denise M Stalls</i>	Date 10/09/2009