Mr. Jim Robinson
ARAMARK Uniform and Career Apparel, Inc.
3701 Progress Drive
South Bend, Indiana 46619

Re: Registered Construction and Operation Status,
141-15502-00132

Dear Mr. Robinson:

The application from ARAMARK Uniform and Career Apparel, Inc., located at 3701 Progress Drive, South Bend, Indiana 46619 received on April 11, 2002, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following industrial laundry operation, is classified as registered:

(a) One (1) natural gas-fired boiler, with a heat input capacity of 29.1 million British thermal units per hour (mmBtu/hr);

(b) Four (4) natural gas-fired dryers, identified as #1, #2 #6, and #7 each with a heat input capacity of 2.75 mmBtu/hr;

(c) Two (2) natural gas-fired dryers, identified as #3 and #4 each with a heat input capacity of 2.5 mmBtu/hr;

(d) One (1) natural gas-fired dryer, identified as #5 with a heat input capacity of 2.9 mmBtu/hr;

(e) One (1) natural gas-fired dryer, identified as #8 with a heat input capacity of 0.25 mmBtu/hr;

(f) One (1) natural gas-fired dryer, identified as #9 with a heat input capacity of 0.37 mmBtu/hr; and

(g) Two (2) steam tunnel, one is identified as #1 with a heat input capacity of 0.75 mmBtu/ hour and the other is identified as #2, with a heat input capacity of 0.50 mmBtu/ hour.

The following conditions shall be applicable:

1. Opacity Limitations [326 IAC 5-1-2]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A,

Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

2. Emission Statement [326 IAC 2-6]

(a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received by the department each year by April 15 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

St. Joseph Local Agency
St. Joseph County Health Department, Rm 914
County-City Building
South Bend, Indiana 46601

The emission statement does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, St. Joseph County Health Department on or before the date it is due.

3. Particulate Matter Emissions (PM) Limitations for Sources of Indirect Heating [326 IAC 6-2]

Pursuant 326 IAC 6-2-3, the PM emissions from the 29.1 mmBtu/hr boiler shall be limited to 0.8 pound per million British thermal unit (lb/mmBtu) heat input .

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3)). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

APD

cc: File - St. Joseph County
St. Joseph County Health Department
Air Compliance - Rick Reynolds
Northern Regional Office
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak
Office of Enforcement

Registration
Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

Company Name:	**ARAMARK Uniform and Career Apparel, Inc.**
Address:	**3701 Progress Drive**
City:	**South Bend**
Authorized individual:	**Jim Robinson**
Phone #:	**(219) 234-1045**
Registration #:	**141-15502-00132**

I hereby certify that **ARAMARK Uniform and Career Apparel, Inc.** is still in operation and is in compliance with the requirements of **Registration 141-15502-00132.**

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	ARAMARK Uniform and Career Apparel, Inc.
Source Location:	3701 Progress Drive, South Bend, Indiana 46619
County:	St. Joseph
SIC Code:	7218
Operation Permit No.:	141-15502-00132
Permit Reviewer:	Aida De Guzman

The Office of Air Quality (OAQ) has reviewed an application from ARAMARK Uniform and Career Apparel, Inc., an industrial laundry facility relating to the operation of the following equipment:

(a) One (1) natural gas-fired boiler, with a heat input capacity of 29.1 million British thermal units per hour (mmBtu/hr);

(b) Four (4) natural gas-fired dryers, identified as #1, #2 #6, and #7 each with a heat input capacity of 2.75 mmBtu/hr;

(c) Two (2) natural gas-fired dryers, identified as #3 and #4 each with a heat input capacity of 2.5 mmBtu/hr;

(d) One (1) natural gas-fired dryer, identified as #5 with a heat input capacity of 2.9 mmBtu/hr;

(e) One (1) natural gas-fired dryer, identified as #8 with a heat input capacity of 0.25 mmBtu/hr;

(f) One (1) natural gas-fired dryer, identified as #9 with a heat input capacity of 0.37 mmBtu/hr; and

(g) Two (2) steam tunnel, one is identified as #1 with a heat input capacity of 0.75 mmBtu/ hour and the other is identified as #2, with a heat input capacity of 0.50 mmBtu/ hour.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
1	Dryer 1	28	2.5	6500	180
2	Dryer 2	28	2.5	6,500	180
3	Dryer 3	35	2	7000	180
4	Dryer 4	35	2	7000	180
5	Dryer 5	35	2.5	6500	180

6	Dryer 6	28	2.5	6500	180
7	Dryer 7	28	2.5	6500	180
8	Dryer 8	28	1	1700	150
9	Dryer 9	28	1	1700	150
10	Steam Tunnel 1	27	1	2200	-
10A	Steam Tunnel 1	27	1	955	-
11	Steam Tunnel 2	27	1	2200	-
11A	Steam Tunnel 2	27	1	885	-
12	Boiler	45	3	9300	360

Enforcement Issue

(a) IDEM is aware that all the above equipment has been constructed and operated prior to receipt of the proper permit.

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on April 11, 2002.

Emission Calculations

(a) Various Natural gas-Fired Dryers and Steam Tunnel: See Page 1 of 2 TSD Appendix A for detailed emission calculations.

(b) Natural Gas-Fired Boiler: See Page 2 of 2 TSD Appendix A for detailed emission calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	0.4
PM-10	1.7
SO_2	0.2
VOC	1.2
CO	18.3
NO_x	21.8

Justification for the Approval Level

The source is a Registered source, pursuant to 326 IAC 2-5.5, since Oxides of Nitrogen (NOx) is emitted at a rate of ten (10) tons per year or greater but less than twenty-five (25) tons per year.

Limited Potential to Emit

Existing Unpermitted Source, PSD, Part 70 or FESOP Definition. The table below summarizes the total potential to emit, reflecting all limits.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Various Natural Gas-Fired Dryers	0.2	0.7	0.1	0.5	7.6	9.1	0.0
Natural Gas-Fired Boiler	0.2	1.0	0.1	0.7	10.7	12.7	0.0
Total Emissions	0.4	1.7	0.2	1.2	18.3	21.8	0.0

County Attainment Status

The source is located in St. Joseph County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	Maintenance
CO	attainment
Lead	not determined

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. St. Joseph County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) St. Joseph County has been classified as attainment or unclassifiable for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)
This existing unpermitted source, is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:
(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to the source.

Federal Rule Applicability

(a) New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60):

(1) 40 CFR § 60.40c, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. This rule applies to each steam generating unit for which construction, reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 100 million British Thermal Units per hour (mmBtu/hr) or less, but greater than 10 mmBtu/hr.

The 29.1 mmBtu/hr Boiler, which was installed in 1966 is **not** subject to 40 CFR § 60.40c, Subpart Dc, as it predates the applicability of the rule.

(b) National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63).

(1) 40 CFR § 60.320, Subpart M - National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities. This NSPS applies to each dry cleaning facility that uses perchloroethylene. ARAMARK Uniform and Career Apparel, Inc. is **not** subject to this NSPS because its industrial laundry operation does not involve dry cleaning.

(2) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source

State Rule Applicability - Entire Source

(a) 326 IAC 2-6 (Emission Reporting)
This source is subject to 326 IAC 2-6 (Emission Reporting), because the source is located in St. Joseph and it has the potential to emit more than ten (10) tons per year of oxides of nitrogen (NOx). Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

(b) 326 IAC 5-1 (Visible Emissions Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(1) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six

(6) minute averaging period as determined in 326 IAC 5-1-4.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

(a) 326 IAC 6-2 (PM Emissions Limitations for Sources of Indirect Heating)

(2) 326 IAC 6-2-3, applies to indirect heating facilities existing and in operation before September 21, 1983. The 29.1 mmBtu/hr boiler is subject to this rule, since it was constructed in 1966, which is before September 21, 1983. This rule limits the boiler PM emissions using the following equation:

$$Pt = \frac{C * a * h}{76.5 * Q^{0.75} * N^{0.25}}$$
$$= \frac{50 * 0.67 * 45}{76.5 * (29.1)^{0.75} * (1)^{0.25}}$$
$$= 1.57 \text{ lb/mmBtu}$$

Pursuant to section (d) of this rule, PM emissions from all facilities used for indirect heating purposes which were existing and in operation on or before June 8, 1972, shall in no case exceed 0.8 lb/mmBtu heat input

Where:

C = Maximum ground level concentration with respect to distance from the point source at the “critical” wind speed for level terrain. This shall equal 50 micrograms per cubic meter (F/m^3) for a period not to exceed a sixty (60) minute time period.

Pt = Pounds of Particulate matter emitted per million Btu (lb/mmBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility’s permit application, except when some lower capacity is contained in the facility operation permit; in which case, the capacity specified in the operation permit shall be used.

N = Number of stacks in fuel burning operation.

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000mmBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 mmBtu/hr heat input.

h = Stack height in feet. If a number of stacks of different height exist, the average stack height to represent “N” stack shall be calculated by weighing each stack height with its particulate

matter emission rate as follows:

$$h = \frac{\sum_{i=1}^{N} H_i \times pa_i \times Q}{\sum_{i=1}^{N} pa_i \times Q}$$

Where:

pa = the actual controlled emission rate in lb/mmBtu using the emission factor from AP-42 or stack test data. Stacks constructed after January 1, 1971, shall be credited with GEP stack height only. GEP stack height shall be calculated as specified in 326 IAC 1-7.

Using Natural Gas:

0.2 tons of PM/yr * yr/8760 hrs * 2000 lb/ton * hr/29.1 mmBtu = 0.0016 lb/mmBtu
Therefore, the boiler is in compliance, since it is emitting 0.0016 lb PM/mmBtu, which is less than the allowable of 0.8 lb/mmBtu.

(3) The natural gas-fired dryers are not subject to 326 IAC 6-2, since they are not sources of indirect heating.

Conclusion

The operation of this industrial laundry facility shall be subject to the conditions of the attached **Registration 141-15502-00132**.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Name: ARAMARK Uniform and Career Apparel, Inc.
Address City IN Zip: 3701 Progress Dr., South Bend, IN 46619
Registration No.: 141-15502
Plt ID: 141-00132
Reviewer: Aida De Guzman
Date Application Received: April 11, 2002

Dryers #1, #2, #6 & #7 @ 2.75 mmBtu/hr
Dryers #3 & #4 @ 2.5 mmBtu/hr
Dryer #5 @ 2.9 mmBtu/hr
Dryer #8 @ 0.25 mmBtu/hr
Dryer #9 @ 0.37 mmBtu/hr
Steam Tunnel #1 @ 0.75 mmByu/hr
Steam Tunnel #2 @ 0.50 mmBtu/hr

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
20.8	181.9

Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.2	0.7	0.1	9.1	0.5	7.6

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Name: ARAMARK Uniform and Career Apparel, Inc.
Address City IN Zip: 3701 Progress Dr., South Bend, IN 46619
Registration No.: 141-15502
Plt ID: 141-00132
Reviewer: Aida De Guzman
Date Application Received: April 11, 2002

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Natural Gas-Fired Boiler @ 29.1 mmBtu/hr
29.1	254.9	

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.2	1.0	0.1	12.7	0.7	10.7

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).