

# Application Routing and Transmittal Sheet (AC/AO/AF)

Air Permitting Supervisor - Required Information for Project Setup by Admin			
Owner/(Facility Name, if needed):	Outokumpu Stainless, Inc. Tubular Products		
Facility ID No.:	New		
Project Name:	Initial Construction Permit		
Project Description:	Initial Construction Permit, co-processed with 002-AO		
Facility Type:	<input checked="" type="checkbox"/> New <input type="checkbox"/> Relocatable	Total Fee Submitted (\$):	2000 3000.00
Type/Subtype:	ACH 00	Total Fee Required (\$):	2000 3000.00
Date Received:	8/20/07	Net Fee Needed (\$):	0
Fee Status:	<input checked="" type="checkbox"/> Correct <input type="checkbox"/> Incorrect <input type="checkbox"/> NA	Net Fee Refund (\$):	0
Fee Checked By:	CZ	Fee override reason:	Multiple Sources
Date Fee Checked:	8/21/07	(if needed)	

Admin - Project Setup Information				Permit Number:
Project Number:	001	Initial ARMS Entry	Date: 8/21/07 Initials: MC	1190046-001-AC

Air Permitting Supervisor - Application Information					
Application Assigned To:	McDonald J	No. of Hardcopies:	1	Copies issued to DEP Engineer:	1
Date Assigned:	8/21/07	No. of Disk:	0	Copies issued to County:	na
Confidential Information (Y/N):		EPSAP (Y/N):	n	Copies issued to other:	na

Compliance/Enforcement Review (review marked by supervisor)	
Permit Supervisor - Email sent for application review/comments:	na, new facility
Permit Supervisor - Copy of transmittal sheet to Bret Galbraith (new facility)? (Y/N):	Y
Permit Supervisor - Draft Permit Review? (Y/ED):	ED

Air Permitting - Permit Transmittal (add initials & date completed)					
	Intent / Draft		Final		
Permit Clock Dates	Day 30: 9/19/07	Day 90: 1-3-08	Day 30: —	Day 90: 2-13-08	
Zipfile Name On Air Common *	1190046.001.AC.002.AO.d.Outokumpu.ZIP		1190046.001.AC.002.AO.Outokumpu.ZIP		
Final Permit Name On Air Common *	1190046.001.AC.002.AO.Outokumpu.DOC		1190046.001.AC.002.AO.Outokumpu.DOC		
Engineer → Permit Reviewer					
Permit Reviewer → Permit Supervisor	jm 11-8-07		jm 1-10-08		
Permit Supervisor → DAPA	CJ 11/14/07		CJ 1/10/08		
DAPA → Clerk/Engineer	MBL 11-25-07/12-05-07		MBL 01-11-08		
Permit Package Mailed / Emailed	12-12-07		01-11-08		
Arms Event Entry	12-12-07		01-11-08		
Copy to Interested Party (Y/N)					
Posted to DEP Website	12-12-07		01-11-08		
ARMS Inventory Data Entry	11-8-07 jm		01-11-08		
Permitting Clerk:	01-11-08				

\* Air\_Common\Permitting\Permits\PermitXX\

Air Permitting Supervisor - Data Fields for Access System (add at final Issuance)			
Issue Date:		296	
Facility Description:	OTHER	MACT	
Source Description:	OTHER	NSPS	
Control Equipment:		FUELS	P
Project Description / Comments:	STAINLESS STEEL PIPE MANUFACTURING AND SANDBLASTING		
Permit Clerk - Permit List Data Entry (Access):	01-11-08		

Special Routing	
Permitting Supervisor - Engineer to send final permit to compliance section (Y/N):	Y

<input checked="" type="checkbox"/> Application Log	<input checked="" type="checkbox"/> Fee Verification in ARMS	<input checked="" type="checkbox"/> Deadline Check	<input checked="" type="checkbox"/> Project ID
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# Application Routing and Transmittal Sheet (AO/AF)

Air Permitting Supervisor – Required Information for Project Setup by Admin			
Owner/(Facility Name, if needed):	Outokumpu Stainless, Inc.		
Facility ID/No.:	1190046		
Project Name:	initial operation permit		
Project Description:	initial operation permit, co-processed with 001-AC		
Facility Type:	<input type="checkbox"/> New <input type="checkbox"/> Relocatable	Total Fee Submitted (\$):	750 1500 11/8/07
Type/Subtype:	AO00	Total Fee Required (\$):	1500
Date Received:	10/5/07	Net Fee Needed (\$):	<del>750</del>
Fee Status:	<input type="checkbox"/> Correct <input checked="" type="checkbox"/> Incorrect <input type="checkbox"/> NA	Net Fee Refund (\$):	0
Fee Checked By:	cz	Fee override reason:	multiple sources
Date Fee Checked:	10/8/07	(if needed)	

Admin – Project Setup Information				Permit Number:	1190046-002-AO
Project Number:	002	Initial ARMS Entry	Date:	Initials:	

Air Permitting Supervisor – Application Information					
Application Assigned To:	Mcdonald_J	No. of Hardcopies:	4	Copies issued to DEP Engineer:	4
Date Assigned:	10/08/07	No. of Disk:	0	Copies issued to County:	na
Confidential Information (Y/N):		EPSAP (Y/N):	0	Copies issued to other:	na

Compliance/Enforcement Review (review marked by supervisor)	
Permit Supervisor – Email sent for application review/comments:	see 001-AC
Permit Supervisor – Copy of transmittal sheet to Bret Galbraith (new facility)? (Y/N):	n
Permit Supervisor – Draft Permit Review? (Y/ED):	ed

Air Permitting - Permit Transmittal (add initials & date completed)					
	Intent / Draft		Final		
Permit Clock Dates	Day 30: 12-05-07	Day 90: 2-3-08	Day 30: _____	Day 90: 2-13-08	
Zipfile Name On Air Common *	1190046.001.AC.002.AO.2.OUTOKUMPU.ZIP		1190046.001.AC.002.AO.2.OUTOKUMPU.ZIP		
Final Permit Name On Air Common *	/		1190046.001.AC.002.AO.2.OUTOKUMPU.DOC		
Engineer → Permit Reviewer					
Permit Reviewer → Permit Supervisor	jm 11-8-07		jm 1-10-08		
Permit Supervisor → DAPA			see 001-AC		
DAPA → Clerk/Engineer					
Permit Package Mailed / Emailed					
Arms Event Entry					
Copy to Interested Party (Y/N)					
Posted to DEP Website					
ARMS Inventory Data Entry:	11-8-07 jm		Permitting Clerk:		

\* Air\_Common\Permitting\Permits\PermitXX\


Air Permitting Supervisor - Data Fields for Access System (add at final Issuance)			
Issue Date:		296	
Facility Description:	OTHER	MACT	
Source Description:	OTHER	NSPS	
Control Equipment:		FUELS	P
Project Description / Comments:	STAINLESS STEEL PIPE MANUFACTURING AND SANDBLASTING		
Permit Clerk – Permit List Data Entry (Access):			

Special Routing	
Permitting Supervisor – Engineer to send final permit to compliance section (Y/N)	Y

<input checked="" type="checkbox"/> Application Log <input type="checkbox"/> Fee Verification in ARMS <input type="checkbox"/> Deadline Check <input checked="" type="checkbox"/> Project ID
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MEMORANDUM

TO: Cindy Zhang-Torres, P.E.  
Air Permitting Supervisor

FROM: Jim McDonald 

DATE: January 10, 2008

SUBJECT: Recommend permits 1190046-001-AC and 1190046-002-AO for Outokumpu Stainless Pipe, Inc. be issued. Day 90 is February 13, 2008

I recommend permits 1190046-001-AC and 1190046-002-AO (one document) for Outokumpu Stainless Pipe, Inc. be issued.

There have been no changes to the permit(s) as they were originally proposed with the Intent to Issue.

The public notice was properly published on December 20, 2007, as required and as of this date no comments have been received.

MEMORANDUM

TO: Cindy Zhang-Torres, P.E.  
Air Permitting Supervisor

FROM: Jim McDonald 

DATE: November 9, 2007

SUBJECT: Recommend the Intent to Issue for Outokumpu Stainless Pipe, Inc. be signed.  
DEP File Nos. 1190046-001-AC and 1190046-002-AO

From the information below, I recommend the Intent to Issue for Outokumpu Stainless Pipe, Inc. be signed. Day 90 is January 3, 2008.

On August 20, 2007, the Department received from Outokumpu Stainless Pipe, Inc. an after-the-fact air pollution construction permit application and operation permit application for three (3) propane fired annealing furnaces and an outside wet sand blasting area located at a natural non-Title V facility that manufactures stainless steel pipe at 1101 North Main Street, Wildwood, Sumter County.

The existing Roller Hearth Furnace (F-1) and Car-Bottom Furnace (F-2) did not require an air pollution permit, since their potential emissions qualified to be exempt from permitting per Rule 62-210.300(3)(b)2., F.A.C. When the Rotary Roller Furnace (F-3) was installed in July of 2006, the total combined potential emissions of NO<sub>x</sub> from the three (3) furnaces then exceeded the exemption criteria of Rule 62-210.300(3)(b)2., F.A.C. Thus, prior to installing the third furnace (Rotary Roller Furnace (F-3)), Outokumpu Steel Pipe, Inc. should have obtained an air pollution construction permit and then later obtained an air operation permit.

The three (3) furnaces are limited in these permits to being fired only with propane at a maximum allowable total combine usage rate of 2,881,690 gallons per any consecutive 12-month period.

The existing outside wet sand blasting area, which was installed in November of 2006, is limited in these permits to using a maximum of 3,553 tons of sand blasting media per any consecutive 12-month period. The sand blasting media usage is based on the amount of sand blasting media transferred to an exempt elevated sand blasting media storage hopper/bin.

Outokumpu Stainless Pipe, Inc. should have also obtained an air construction permit prior to constructing the wet sand blasting area and subsequently obtaining an air operation permit.

The permits require the furnaces and wet sand blasting area to demonstrate compliance with their operating limitations by recordkeeping.

Cindy Zhang-Torres and I visited the facility on September 12, 2007.

An enforcement referral dated October 26, 2007, regarding the above issues has been submitted to Danielle Henry for processing.



# Florida Department of Environmental Protection

Southwest District Office  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637-0926

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

October 08, 2007

OUTOKUMPU STAINLESS, INC.  
1101 NORTH MAIN STREET  
WILDWOOD FL 34785

Dear Sir/Madam:

Your check number 036919 for \$1,750.00, is being returned for the following reason(s):

**\*Insufficient Fee. The correct fee is \$ 2500.00.**

**The application cannot be reviewed or processed until full payment is received.**

For more program specific information, please contact:

Cindy Zhang-Torres Phone: 813-632-7600 x107  
Department of Environmental Protection  
Southwest District Office  
13051 N Telecom Pkwy  
Temple Terrace FL 33637

Sincerely,

Sandra Wilson  
Finance and Accounting

RCT\_Ret\_R/ 8617

Enclosure(s)

9-10-07  
WORKING INCOMPLETENESS LETTER  
WHICH THEY HAVE (EXCEPT No. 32)

September 12, 2007

Mr. Domenick DiGiallonardo  
Director of Quality  
Outokumpu Stainless, Inc.  
1101 North Main Street  
Wildwood, FL 34785-9601

Re: Outokumpu Stainless, Inc.'s application and cover letter dated August 16, 2007  
Outokumpu Stainless, Inc.'s letter dated February, 12, 2007  
FDEP File No. 1190046-001-AC

Dear Mr. DiGiallonardo:

On August 20, 2007, the Department received your air pollution permit application for your Tubular Products manufacturing facility located at 1101 North Main Street, Wildwood, Sumter County. In addition to the application you also submitted two (2) letters dated February 12 and August 16, 2007. In order to continue processing the application, the Department will need the following additional information pursuant to Rules 62-4.055 and 62-4.070(1), F.A.C.:

1. Explain in more detail the pickling activities that emit the hazardous air pollutant Hydrofluoric Acid along with the potential uncontrolled emission calculations to support the statement in your August 16, 2007 letter which says, "We determined that the Hydrofluoric Acid emissions are well below the permit de minimus level."
2. Explain in more detail the lime handling operations along with the potential uncontrolled particulate matter (PM) emission calculations. Note, your letter dated February 12, 2007, states the emissions are 0.39 tons/yr., whereas your letter dated August 16, 2007, states the emissions are 0.00 tons/yr.
3. Regarding the sandblasting operation in your letter dated August 16, 2007: Submit a copy of Table 4-3 of AP-42. How were the Maximum Operational Efficiency and Measured Control Effectiveness determined? Since potential PM emissions should be determined without control equipment when qualifying to be exempt from permitting, explain why the Operational Efficiency and Measured Control Effectiveness should be taken into consideration. Why does this letter show emissions as 3.42 tons/yr. and 4.10 tons/yr. If these values are for PM-10, resubmit the emission calculations for PM.
4. Explain why your letter dated February 12, 2007, states the emissions from welding are 0.55 tons/yr., whereas your letter dated August 16, 2007, states the emissions are 1.68 tons/yr. If these values are for PM-10, resubmit the emission calculations for PM.

5. Regarding the two (2) steel grit blasting operations in your letter dated August 16, 2007: The letter states the emissions are for PM-10. Submit the emission calculations to show the potential uncontrolled PM emissions.
6. The application shows the company name as Outokumpo Stainless, Inc., whereas the Department of State shows the company name as Outokumpu Stainless Pipe, Inc. Explain this difference.
7. Page 2 of the application requests a construction permit and an operation permit. Page 5 of the application indicates (AO2C) the application is only for an operation permit. Is it correct, the application is only for a construction permit (AC1D)? If no, explain. {Per No. 31 below, if ~~if~~ other activities not similar to the 3 furnaces require ~~to~~ a permit, additional fees and applicable pages of the application should also be submitted.} ~~FAIR~~
8. Page 7 of the instructions to the application states the following: "**Note:** If the authorized representative of the facility addressed in this application is not the individual owner of the facility, an officer of the corporation that owns or operates the facility, or an elected official of the governmental unit that owns or operates the facility, a letter of authorization from such owner, officer, or elected official designating the person named in this field as the authorized representative must be submitted. If such a letter is on file with the Department, it need not be resubmitted."

Based on the above instructions to the application, submit a Letter of Authorization from an officer of the company designating you as an Authorized Representative.

9. Submit the precautions the facility intends to implement to control unconfined particulate matter (e.g., sandblasting, roadways, etc.) as requested in No. 4 on page 10 of the application.
10. Resubmit pages 14, 21, and 28 of the application showing the correct SCC numbers. Do you agree 39001089 (General – LPG) and 30300934 (Heat Treating Furnace: Annealing) are the correct numbers? If no, explain and provide the correct numbers.
11. Page 12 of the application states the maximum production rate is 2.29 tons/hr. Page 14 of the application states the maximum hourly rate is 2.28 tons/hr. Explain this difference.
12. Page 12 of the application states the maximum process or throughput rate is 20,034 tons/yr. Page 14 of the application states the maximum annual rate is 20,033 tons/yr. Explain this difference.
13. Pages 12, 14, and 15 of the application state the heat input rate in MMBTU/hr. is 8, 11.5, and 7.14 (78 gallons/hr. x 91,500 BTUs/gallon), respectively. What is the correct maximum potential MMBTU/hr. heat input rate and maximum permitted heat input rate you are requesting?
14. Page 15 of the application shows the value 0.28 gals./ft.<sup>3</sup>. Should this value be 0.028 gals./ft.<sup>3</sup>? Also see pages 22 and 29 of the application.

15. Page 15 of the application shows the value 2,835 ft.<sup>3</sup>/hr. (1 ft.<sup>3</sup>/2520 BTU x 7,144,200 BTU/hr.). Based on your answer to No. 13 above, should this value change?
16. Page 15 of the application shows the potential NOx emissions as 1.58 lbs./hr. Should this value be 1.48 lbs./hr. as shown in the requested allowable emission?
17. Based on 11.5 MMBTU/hr. and 91,500 BTU/gal. for Furnace F-1, do you agree the potential NOx emissions would be 10.46 tons/yr. (19 lbs./1000 gals. x 125.68 gals./hr. x 8,760 hrs./yr. x 1 ton/2000 lbs.)?
18. Page 19 of the application for Furnace F-2 shows the maximum process or throughput rate as "22,407 tons/yr. ????" and the maximum production rate as "2.56 tons per hour????". Since the values are followed by "????", explain: 1) how the values were determined; 2) how the values are measured; and 3) if these values are correct.
19. Page 19 of the application shows the maximum heat input rate as 11.5 MMBTU/hr., page 21 shows the maximum heat input rate as 20 MMBTU/hr., and page 22 shows the maximum heat input rate as 10.25 MMBTU/hr. (112 gals./hr. x 91,500 BTU/gal.) What is the correct maximum potential MMBTU/hr. heat input rate and maximum permitted heat input rate you are requesting?
20. Page 22 of the application shows the value 4,076 ft.<sup>3</sup>/hr. (1 ft.<sup>3</sup>/2520 BTU x 10,271,520 BTU/hr.). Based on your answer to No. 19 above, should this value change?
21. Page 22 of the application shows the NOx emissions as 2.22 lbs./hr., 2.13 lbs./hr. and 2.15 lbs./hr. Which value is correct?
22. Based on 20.0 MMBTU/hr. and 91,500 BTU/gal. for Furnace F-2, do you agree the potential NOx emissions would be 18.19 tons/yr. (19 lbs./1000 gals. x 218.56 gals./hr. x 8,760 hrs./yr. x 1 ton/2000 lbs.)?
23. Page 26 of the application shows the maximum production rate as 2.29 tons/hr. Page 28 of the application shows the maximum hourly rate as 2.23 tons/hr. Which value is correct?
24. Page 26 of the application shows the maximum heat input rate of 10.3 MMBTU/hr. Page 28 of the application shows the maximum heat input rate of 22 MMBTU/hr. What is the correct maximum potential MMBTU/hr. heat input rate and maximum permitted heat input rate you are requesting?
25. Page 29 of the application shows the value 4,120 ft.<sup>3</sup>/hr. (1 ft.<sup>3</sup>/2520 BTU x 10,382,400 BTU/hr.). Based on your answer to No. 24 above, should this value change?
26. Page 29 of the application shows the NOx emissions as 9.43 tons/yr. and 9.33 tons/yr. Which value is correct?



27. Based on 22.0 MMBTU/hr. and 91,500 BTU/gal. for Furnace F-3, do you agree the potential NOx emissions would be 20.01 tons/yr. (19 lbs./1000 gals. x 240.44 gals./hr. x 8,760 hrs./yr. x 1 ton/2000 lbs.)?
28. Is it correct, the application as submitted can in its entirety can be placed in the Department's public file? If no, resubmit the application with the only the specific CONFIDENTIAL piece and/or pieces of information left "blank". Also, please explain how each blank piece (number, value, process description, etc.) and/or pieces of information qualify to be considered CONFIDENTIAL per Section 403.111 of the Florida Statutes.
29. Attachment APD-2 of the application shows the following:
- F-1: 78 gals./min. (which equals 4,680 gals./hr.)  
F-2: 162 gals./min. (which equals 9,720 gals./hr.)  
F-3: 123 gals./min. (which equals 7,380 gals./hr.)
- Should these values be 78 gals./hr. for F-1, 112 gals./hr. for F-2, and 113 gals./hr. for F-3 as shown in the application? If no, explain.
30. Does this facility operate any emergency generators and/or fire pumps? If yes, explain how the generators and/or pumps qualify to be exempt from permitting. Your response should take into consideration the unit specific requirements of Title 40 of the Code of Federal Regulations, Part 60, Subpart IIII – Stationary Compression Ignition Internal Combustion Engines, which became effective on September 11, 2006.
31. If your responses above change the information submitted and/or add additional emission units submit the applicable additional pages of the application and processing fees.
32. How is the propane to each furnace measured and documented?

NOTE - Rule 62-4.050, F.A.C. requires applications of this type must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. Therefore, your response to the above requests should be certified by a professional engineer.

Your response should be submitted by November 30, 2007. If you have any questions, please call me at 813-632-7600 extension 106.

Sincerely,

James L. McDonald  
Air Permitting Engineer

cc: Mr. Charles Burns, P.E.  
Diversified Engineering International, Inc.

Outokumpo Stainless, Inc.  
FDEP File No. 1190046-001-AC

Page 5 of 5

5378 Riverview Drive  
St. Augustine, FL 32080

September 12, 2007

Mr. James L. McDonald  
Florida Department of Environmental Protection  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637

**OUTOKUMPU STAINLESS PIPE, INC. RESUBMITTAL OF APPLICATION FOR AIR  
PERMIT, NON TITLE V SOURCE, FILE # 1190046-001-AC**

Mr. McDonald,

Diversified Engineering on behalf of Outokumpu Stainless Pipe, Inc. will resubmit the subject Non-Title V source Air Permit in its entirety by October 5, 2007.

Please do not hesitate to contact me at 352-748-9265 if you have any questions.

Best regards,

**Outokumpu Stainless Tubular Products**



Domenick DiGiallonardo  
Director Quality

cc: Tom Drygass, Deversified Engineering



Rec'd during  
visit to facility  
on 9-12-07  
Jm

September 11, 2007

Mr. James L. McDonald  
Air Permitting Engineer  
Florida DEP  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637-0926

Topic: Response to September 12, 2007 letter from Mr. James L. McDonald Letter to  
Domenick DiGiallonardo of Outokumpu Stainless, Inc.

Reference: Outokumpu Stainless, Inc.'s application and cover letter dated August 16, 2007  
Outokumpu Stainless, Inc.'s letter dated February, 12, 2007 FDEP File No. 1190046-  
001-AC

Dear Mr. McDonald:

We are responding to the additional information you requested in your September 12<sup>th</sup>. letter related to the pollution permit application of Outokumpu Stainless, Inc. manufacturing facility located at 1101 North Main Street, Wildwood, Sumter County, Florida. We have copied each of your requests and have added a response to each pursuant to Rules 62-4.055 and 62-4.070(1), F.A.C.:

1. Explain in more detail the pickling activities that emit the hazardous air pollutant Hydrofluoric Acid along with the potential uncontrolled emission calculations to support the statement in your August 16, 2007 letter which says, "We determined that the Hydrofluoric Acid emissions are well below the permit de minimus level."

***R.1 The facility stores 70% hydrofluoric acid (HF acid) in an 8,000 gallon ambient above ground storage tank. Deliveries are made from a tank truck directly to the HF acid tank. From the storage tank HF acid is gravity fed batch wise and metered into each one of three pickling tanks. This is done on an as needed basis to maintain a HF acid concentration at or just above 3 % in each tank. The pickling solution consists of three ingredients, HF acid, nitric acid at 10 % and the remainder is water and byproduct salts. The solution is maintained at 110 degrees F. The pickling tanks are used to***

*remove the oxidized surface which forms on the stainless steel pipes during the annealing process. Pipe is submerged in a tank. Time in the tanks depends on the pipe composition and amount of oxidize on its surface.*

*The HF acid operating process has several emission sources. The HF acid storage tank and each of the three pickle tanks. Attached under Tab # 1 is a report of Air Emissions Survey dated February 12, 2007. The report addresses Furnace Operations, HF Acid Operations, Lime Operations and Welding Operations. Section 4.2 of the report reviews in detail the emission determination of the HF acid system. Table # 2 and Table # 3 contain the emissions summary. The total emissions from the HF acid storage and the three pickling tanks is 468.72 pounds per year.*

2. Explain in more detail the lime handling operations along with the potential uncontrolled particulate matter (PM) emission calculations. Note, your letter dated February 12, 2007, states the emissions are 0.39 tons/yr., whereas your letter dated August 16, 2007, states the emissions are 0.00 tons/yr

**R.2** *Hydrated lime is received from tank trucks, stored and dispensed from a lime storage tank. The dispensed lime is fed to a slaking unit and the slaked lime is used to treat the waste water. AP-42 emission factors were used to determine the emission from the delivery and transfer operations.*

*Attached under Tab # 1 is the Preliminary Emissions Report of February 12, 2007. Section 4.3.2, lime operations contribution reviews the calculations and results. It states there are 0.372 tons of particulate matter emitted yearly and that the operation is absent PM-10 emissions. Thus the letter of February 12<sup>th</sup> of 0.39 tons is incorrect as it is 0.37 tons. The August 16, 2007 letter state 0.0 tons is for PM-10 lime emissions as AP-42 is absent any PM-10 emissions.*

3. Regarding the sandblasting operation in your letter dated August 16, 2007: Submit a copy of Table 4-3 of AP-42. How were the Maximum Operational Efficiency and Measured Control Effectiveness determined? Since potential PM emissions should be determined without control equipment when qualifying to be exempt from permitting, explain why the Operational Efficiency and Measured Control Effectiveness should be taken into consideration. Why does this letter show emissions as 3.42 tons/yr. and 4.10 tons/yr. If these values are for PM-10, resubmit the emission calculations for PM.

**R.3** *Attached behind Tab # 2 is a copy of Table 4-3 of Emission Factor Documentation for AP-42 Section 13.2.6, Abrasive Blasting.*

*The maximum operational control efficiency was measured on two consecutive days for a two man crew performing the blasting operation. This is discussed in detail in the attached report, supplement to 2/12/07 Emissions report. It takes into account use the very labor intensive handling of the pipes as well as the blasting operation. We divided the blasting time by the total time worked.*

*We used the control efficiency for the integral water hallow nozzle based on it being an integral part of the sandblasting operation. A mean measured control Efficiency was taken from Table 4-3 of AP-42 for White Metal, Inc.*

*Please refer to Table # 1 of the Supplement to the 2/12/2007 report for the details of this calculation.*

*We made our determination that PM-10 was the regulated particulate. We will review and revise our calculations accordingly.*

4. Explain why your letter dated February 12, 2007, states the emissions from welding are 0.55 tons/yr., whereas your letter dated August 16, 2007, states the emissions are 1.68 tons/yr. If these values are for PM-10, resubmit the emission calculations for PM.

**R.4** *The letter of February 12, 2007 was a preliminary determination. The August 16, 2007 letter is for total particulate as well as PM-10 emissions as all welding emissions were assumed to be PM-10 due to the nature of welding operations.*

*The original calculations and Table of emissions are contained in the appended Revised Air Emissions Survey and Estimated Report of February 12, 2007 attached Tab # 1.*

5. Regarding the two (2) steel grit blasting operations in your letter dated August 16, 2007: The letter states the emissions are for PM-10. Submit the emission calculations to show the potential uncontrolled PM emissions.

**R.5** *Emission factor from Table 4.2 of AP-42 Section 13.2.6 was used for the total particulate for Shot. NOTE, in this is included the particulates generated due to the material being blasted off of the surface of the metal as well as the attrition of the shot itself. Again this is incorrectly labeled PM-10.*

*The calculations and Table of emissions are contained in the appended Revised Air Emissions Survey and Estimated report of February 12, 2007 attached Tab # 1.*

*As recommended we will calculate the PM emissions for the unit.*

6. The application shows the company name as Outokumpu Stainless, Inc., whereas the Department of State shows the company name as Outokumpu Stainless Pipe, Inc. Explain this difference.

**R.6** *The correct name that should be on the permit application is Outokumpu Stainless Pipe, Inc.*

7. Page 2 of the application requests a construction permit and an operation permit. Page 5 of the application indicates (AO2C) the application is only for an operation permit. Is it correct, the application is only for a construction permit (AC1D)? If no, explain. {Per

No. 31 below, ~~if~~ other activities not similar to the 3 furnaces require to a permit, additional fees and applicable pages of the application should also be submitted.}

**R.7** *The permit is for an existing facility in operation. Thus we are requesting both a construction and operating permit. Please advise if this is correct.*

8. Page 7 of the instructions to the application states the following: "**Note:** If the authorized representative of the facility addressed in this application is not the individual owner of the facility, an officer of the corporation that owns or operates the facility, or an elected official of the governmental unit that owns or operates the facility, a letter of authorization from such owner, officer, or elected official designating the person named in this field as the authorized representative must be submitted. If such a letter is on file with the Department, it need not be resubmitted."

Based on the above instructions to the application, submit a Letter of Authorization from an officer of the company designating you as an Authorized Representative.

**R.8** *Please find attached a Letter of Authorization designating Mr. Domenick DiGiallonard, Director of Quality, is the signatory, Tab #4.*

9. Submit the precautions the facility intends to implement to control unconfined particulate matter (e.g., sandblasting, roadways, etc.) as requested in No. 4 on page 10 of the application.

**R.9** *The precautions to prevent emissions of unconfined particulate matter from the sand blasting operations include uses of wind screens on three sides of the sandblasting area which decrease the wind velocity and thus the emissions. Also the sandblasting operation uses a water hallow nozzle which significantly reduces emissions over use of a dry blasting nozzle.*

*The plant has minimal traffic on the small amount of unpaved roadways in the plant. Currently the precaution used is a plant wide speed limit of 5 miles per hour which reduces dust generated. Testing of this dust determines it is below OSHA threshold levels – see Tab #3 report.*

10. Resubmit pages 14, 21, and 28 of the application showing the correct SCC numbers. Do you agree 39001089 (General – LPG) and 30300934 (Heat Treating Furnace: Annealing) are the correct numbers? If no, explain and provide the correct numbers.

**R.10** *The SCC numbers you chose are correct. Based on the number and extent of corrections we will revise the entire permit package and resubmit that to you.*

11. Page 12 of the application states the maximum production rate is 2.29 tons/hr. Page 14 of the application states the maximum hourly rate is 2.28 tons/hr. Explain this difference.

**R.11** *The correct maximum production rate is 2.29 tons per hour based on plant data and information.*

12. Page 12 of the application states the maximum process or throughput rate is 20,034 tons/yr. Page 14 of the application states the maximum annual rate is 20,033 tons/yr. Explain this difference.

**R.12** *This is based on operational data the correct figure is 20,034.*

13. Pages 12, 14, and 15 of the application state the heat input rate in MMBTU/hr. is 8, 11.5, and 7.14 (78 gallons/hr. x 91,500 BTUs/gallon), respectively. What is the correct maximum potential MMBTU/hr. heat input rate and maximum permitted heat input rate you are requesting?

**R.13** *The heat input based on the number of burners is 8.0 MMBTU/hr.  
Block # 4, Maximum Hourly Rate should be 8.0 MMBTU/hr  
Block # 10 Calculation of emissions should be 7.35 tons NOX/year.  
See Tab #5, is a table of Operation Data.  
Tab #6 is a revised calculation spread sheet for the updated potential to emit calculations.*

14. Page 15 of the application shows the value 0.28 gals./ft.<sup>3</sup>. Should this value be 0.028 gals./ft.<sup>3</sup>? Also see pages 22 and 29 of the application.

**R.14** *The conversion is 0.028 gallons of propane per cubic foot of propane.*

15. Page 15 of the application shows the value 2,835 ft.<sup>3</sup>/hr. (1 ft.<sup>3</sup>/2520 BTU x 7,144,200 BTU/hr.). Based on your answer to No. 13 above, should this value change?

**R.15** *The emission calculation was based on two years of operations of the furnace yielding that volume of gas per hour. We used this value to calculate the potential to emit on a continuous basis for 8,760 hours per year.*

*If we use a simple method of max potential for the furnace based on burner capacity the total tons per year of NOX for F-1 is 7.35 tons which equal 1.68 pounds per hour. Based on our meeting we can use either figure as the plant operates over 7 times lower than that figure.*

*Attached under Tab # 5 is a revised spread sheet that depicts the calculations used.*

16. Page 15 of the application shows the potential NOx emissions as 1.58 lbs./hr. Should this value be 1.48 lbs./hr. as shown in the requested allowable emission?

**R.16** *The figure that equals the maximum potential to emit based on burner capacity is 1.68 pounds per hour. See table revised calculation Tab #6.*



17. Based on 11.5 MMBTU/hr. and 91,500 BTU/gal. for Furnace F-1, do you agree the potential NOx emissions would be 10.46 tons/yr. (19 lbs./1000 gals. x 125.68 gals./hr. x 8,760 hrs./yr. x 1 ton/2000 lbs.)?

**R.17** *The maximum hourly rate item # 4 of page 14 of 11.5 MMBTU/hr is incorrect. The maximum rate based on the burner capacity of 1 MMBTU/hr for each of the eight burners yields 8.0 MMBTU/hr. The BTU content of the propane from our supplier is listed at 90,625 BTU/gal. A second value from the vendor is 91,502 BTU/gal. Thus the corrected potential to emit for NOx emissions would be equal to ( 8,000,000 MMBTU/hr. divided by 91,500 BTU/gal times 19 lbs / 1000 gal x 8760 hours/yr times 1 ton divided by 2,000 lbs.) or 7.35 tons VOC per year.*

*If we use a simple method of max potential for the furnace based on burner capacity the total tons per year of NOX for F-1 is 7.35 tons which equals. 1.68 pounds per hour. Based on our meeting we can use either figure as the plant operates over 7 times lower than that figure.*

18. Page 19 of the application for Furnace F-2 shows the maximum process or throughput rate as "22,407 tons/yr. ?????" and the maximum production rate as "2.56 tons per hour?????". Since the values are followed by "?????", explain: 1) how the values were determined; 2) how the values are measured; and 3) if these values are correct.

**R.18** *The ???? marks were a typographical error. The 2.56 tons per hour production rate is base on data from 1988 to 1991 and data from 2005 and 2006 operations. This figure was then multiplied by 8,760 hours per year to obtain the throughput of 22,426 ton/year*

19. Page 19 of the application shows the maximum heat input rate as 11.5 MMBTU/hr., page 21 shows the maximum heat input rate as 20 MMBTU/hr., and page 22 shows the maximum heat input rate as 10.25 MMBTU/hr. (112 gals./hr. x 91,500 BTU/gal.) What is the correct maximum potential MMBTU/hr. heat input rate and maximum permitted heat input rate you are requesting?

**R.19** *The maximum heat input is based on the maximum BTU/hr of the burners and equals 11.5 MMBTU/hr. for block # 1 of Emission Unit. Operating Capacity and for block #4 of page 21. Page 22 is the actual production capacity based on operations. This number should be corrected to 11.5 MM BTU/hr.*

20. Page 22 of the application shows the value 4,076 ft.<sup>3</sup>/hr. (1 ft.<sup>3</sup>/2520 BTU x 10,271,520 BTU/hr.). Based on your answer to No. 19 above, should this value change?

**R.20** *The figure 4,076 ft3/hr is based on furnace operational data. This figure should be changed to the maximum for the furnace which equals the Max BTU/hr of the furnace divided by the BTU/ft3 of Propane which equals. (11.5 MMBTU/hr /2,517 BTU/ft3) or 4,570 ft3/hr of propane. See the revised spreadsheet Tab #6.*

21. Page 22 of the application shows the NO<sub>x</sub> emissions as 2.22 lbs/hr., 2.13 lbs./hr. and 2.15 lbs./hr. Which value is correct?

**R.21** *The correct figure using the maximum figures per item 19 and 20 would be 2.38 lb/hr which equals 10.46 tons of NO<sub>x</sub> per year see items 22 below.*

22. Based on 20.0 MMBTU/hr. and 91,500 BTU/gal. for Furnace F-2, do you agree the potential NO<sub>x</sub> emissions would be 18.19 tons/yr. (19 lbs./1000 gals. x 218.56 gals./hr. x 8,760 hrs./yr. x 1 ton/2000 lbs.)?

**R.22** *Using the corrected figures from 20, 21 and 22 above the calculations should be based on 11.5 MMBTU/hr and would yield 10.46 tons of NO<sub>x</sub> per year (19 lb/1,000 gal. X 125.8 gal/hr. X 8760 hr/yr X 1 ton/2,000 lbs). See Tab #6 spread sheet.*

23. Page 26 of the application shows the maximum production rate as 2.29 tons/hr. Page 28 of the application shows the maximum hourly rate as 2.23 tons/hr. Which value is correct?

**R.23** *The figure that equals the maximum potential to emit based on burner capacity is 2.20 pounds per hour.*

24. Page 26 of the application shows the maximum heat input rate of 10.3 MMBTU/hr. Page 28 of the application shows the maximum heat input rate of 22 MMBTU/hr. What is the correct maximum potential MMBTU/hr. heat input rate and maximum permitted heat input rate you are requesting?

**R.24** *The correct figure for the maximum heat input to the new furnace was confirmed by the manufacture to be 10.6 MMBTU/hr.*

25. Page 29 of the application shows the value 4,120 ft.<sup>3</sup>/hr. (1 ft.<sup>3</sup>/2520 BTU x 10,382,400 BTU/hr.). Based on your answer to No. 24 above, should this value change?

**R.25** *The figure 4,120 ft<sup>3</sup>/hr is based on furnace operational data. This figure should be changed to the maximum for the furnace which equals the Max BTU/hr of the furnace divided by the BTU/ft<sup>3</sup> of Propane which equals. (10.6 MMBTU/hr /2,517 BTU/ft<sup>3</sup>) or 4,212 ft<sup>3</sup>/hr of propane. See Tab #6, spreadsheet calculations.*

26. Page 29 of the application shows the NO<sub>x</sub> emissions as 9.43 tons/yr. and 9.33 tons/yr. Which value is correct?

**R.26** *The correct figures 9.64 tons/yr. This is based on the maximum figures from the above items. See Tab #6, calculation spreadsheet.*

27. Based on 22.0 MMBTU/hr. and 91,500 BTU/gal. for Furnace F-3, do you agree the potential NO<sub>x</sub> emissions would be 20.01 tons/yr. (19 lbs./1000 gals. x 240.44 gals./hr. x 8,760 hrs./yr. x 1 ton/2000 lbs.)?

**R.27** *I agree with the above calculation however: Using the corrected figures from 23, 24 and 25 above the calculations should be based on 10.6 MMBTU/hr and would yield 9.64 tons of NOX per year (19 lb/1,000 gal. X 115.85 gal/hr. X 8760 hr/yr X 1 ton/2,000 lbs) as stated in item 26 above. See Tab #6 calculation spreadsheet.*

28. Is it correct, the application as submitted can in its entirety can be placed in the Department's public file? If no, resubmit the application with the only the specific CONFIDENTIAL piece and/or pieces of information left "blank". Also, please explain how each blank piece (number, value, process description, etc.) and/or pieces of information qualify to be considered CONFIDENTIAL per Section 403.111 of the Florida Statutes

**R.28.** *The sections that are confidential include: Ton steel per year or hour is the way this will be reflected in the revised application.*

29. Attachment APD-2 of the application shows the following:

F-1: 78 gals./min. (which equals 4,680 gals./hr.)

F-2: 162 gals./min. (which equals 9,720 gals./hr.)

F-3: 123 gals./min. (which equals 7,380 gals./hr.)

Should these values be 78 gals./hr. for F-1, 112 gals./hr. for F-2, and 113 gals./hr. for F-3 as shown in the application? If no, explain.

**R.29** *The correct figures per the items above should be F-1 equals 87.43 gal/hr. F-2 equals 125.68 gal/hr and F-3 equals 115.85 gal/hr. See Tab #6 spreadsheet.*

30. Does this facility operate any emergency generators and/or fire pumps? If yes, explain how the generators and/or pumps qualify to be exempt from permitting. Your response should take into consideration the unit specific requirements of Title 40 of the Code of Federal Regulations, Part 60, Subpart IIII – Stationary Compression Ignition Internal Combustion Engines, which became effective on September 11, 2006.

**R.30** *The facility is absent an emergency generator or fire pump systems.*

31. If your responses above change the information submitted and/or add additional emission units submit the applicable additional pages of the application and processing fees.

**R.31** *We will resubmit the entire package subsequent to our meeting on September 12<sup>th</sup>. Based on our agreement we will recalculate the application and processing fees appropriately.*

NOTE - Rule 62-4.050, F.A.C. requires applications of this type must be certified by a professional engineer registered in the State of Florida. This requirement also applies to

responses to Department requests for additional information of an engineering nature. Therefore, your response to the above requests should be certified by a professional engineer.

***We plan to submit an updated permit application which will be certified by a professional engineer.***

Your response should be submitted by November 30, 2007. If you have any questions, please call me at 813-632-7600 extension 106.

Respectfully Submitted

Thomas C. J. Drygas  
President, D.E.I., Inc.

cc: Mr. Tom Kern, Outokumpu  
Mr. Charles Burns, P.E., D.E.I., Inc.

**McDonald, Jim**

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**From:** TDrygas@aol.com  
**Sent:** Thursday, September 06, 2007 9:45 AM  
**To:** McDonald, Jim  
**Cc:** tom.kern@outokumpu.com  
**Subject:** Re: Working Incompleteness letter and Visit to facility

**Jim,**

**Thank you for the draft letter of needed information needed to process the Outokumpu permit application.**

**I will address each of the 31 items and have a response when we meet next week. Looking forward to meeting you and letting you see first hand how we made our determinations.**

**At this time I am not sure which day next week we can meet at Outokumpu as Mr. Kern is not available all this week. He will return to work on the Monday, the 10th of September. I expect a day later in the week would be preferred. Is it possible to meet on either the 13, Thursday or on the 14th, Friday???**

**The time of 9:00 am would work for the site visit and meeting.**

**I will call you if I need any clarification of your information requested.**

**Keep well and be talking to you.**

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9/6/2007

**McDonald, Jim**

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**From:** TDrygas@aol.com  
**Sent:** Thursday, August 30, 2007 1:11 PM  
**To:** McDonald, Jim  
**Cc:** tom.kern@outokumpu.com  
**Subject:** Reschedule of the FL DEP Meeting and site visit Outokumpu Stainlesssteel, Inc.

**Jim,**

**Thank you for working with us on development of the operating permit for Outokumpu Stainless Steel, Inc. As noted in our conversation today the September 7th. site visit date would preclude the Plant Environmental, Manager, Tom Kern from being present.**

**Below is his recommendation to schedule the meeting for the week of September 10th. We will ensure that one of the furnaces are in operation as well as the ID and OD Bead Blasting units and the Sand Blasting Operations.**

**Again I look forward to you letter addressing Outokumpu's Permit Application.**

**Keep well and have a great Labor Day weekend.**

**Respectfully Submitted**

**Tom Drygas.**

**In a message dated 8/30/2007 11:47:31 A.M. Eastern Daylight Time, tom.kern@outokumpu.com writes:**

Tom, the meeting date that the state has proposed (9/7) will not be suitable. I will be out of the plant that week and will be in another city. I will be back on Monday, 9/10. I will have to coordinate the visit with production to ensure that a furnace will be operational. The best thing to do would be to get a date range from him. That way I can look at production and know what days the furnace(s) will be operating and we can plan accordingly. As you know, I cant just walk up and turn a furnace on. The furnaces must be preheated up to 8 hours to keep the refractory from breaking up and I wont be allowed to let one idle very long because of the operating costs.

NOTE\* The furnace operating temperature cannot exceed 2200 F. The electronic controllers will automatically shut the gas off for safety reasons. This is a built in safety device. Also, the pipe will get so soft that it would collapse after 2150 F.

Regards

8/30/2007

Tom Kern  
Outokumpu Stainless Inc.  
Pipe Products

May Your Day be Safe and Productive  
From all of us at D. E. I., Inc.



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Email: [tom@dei-inc.com](mailto:tom@dei-inc.com)

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