

SMAQMD BACT CLEARINGHOUSE

CATEGORY:

Miscellaneous

BACT Size:

Plasma Arc Metal Cutting Torch

BACT Determination Number:	233	BACT Determination Date:	12/20/2019
-----------------------------------	-----	---------------------------------	------------

Equipment Information**Permit Number:** N/A -- Generic BACT Determination**Equipment Description:** Plasma Arc Metal Cutting Torch**Unit Size/Rating/Capacity:** Minor Source BACT**Equipment Location:****EXPIRED****BACT Determination Information**

ROCs	Standard:	
	Technology Description:	
	Basis:	
NOx	Standard:	
	Technology Description:	
	Basis:	
SOx	Standard:	
	Technology Description:	
	Basis:	
PM10	Standard:	99.9% Control Efficiency
	Technology Description:	
	Basis:	Achieved in Practice
PM2.5	Standard:	
	Technology Description:	
	Basis:	
CO	Standard:	
	Technology Description:	
	Basis:	
LEAD	Standard:	
	Technology Description:	
	Basis:	

Comments: T-BACT was determined to be equivalent to BACT.**District Contact:** Felix Trujillo Phone No.: (916) 874 - 7357 email: ftrujillo@airquality.org



**BEST AVAILABLE CONTROL TECHNOLOGY & TOXIC BEST AVAILABLE
CONTROL TECHNOLOGY DETERMINATION**

EXPIRED

DETERMINATION NO.: 233
DATE: 12/20/19
ENGINEER: Felix Trujillo, Jr.

Category/General Equip Description: Miscellaneous

Equipment Specific Description: Plasma Arc Metal Cutting Torch

Equipment Size/Rating: Minor Source BACT

Previous BACT Det. No.: 158

This BACT determination will update Determination #158 (8/1/17) for a plasma arc metal cutting torch.

BACT ANALYSIS

Pursuant to the District's BACT Guidelines (2016), a review of the EPA, CARB, SCAQMD, SJVAPCD, BAAQMD and SDAPCD BACT Clearinghouses was performed. The District also reviewed any applicable rules from the aforementioned air districts that apply to this type of operation. The review of these sources showed no change in the rules or BACTs that were previously evaluated for minor sources under BACT No. 158. Therefore, there is no change in requirements as was previously determined under BACT No. 158. BACT No. 158 (Appendix A) will be attached as a reference for this BACT determination (see Attachment A).

C. SELECTION OF BACT & T-BACT:

BACT # 233 For Plasma Arc Metal Cutting Torch		
Pollutant	Standard	Source
VOC	No Standard	
NOx	No Standard	
SOx	No Standard	
PM10	99.9% Control Efficiency	SJVAPCD, SMAQMD, EPA BACT Clearinhouse
PM2.5 (A)	No Standard	
CO	No Standard	

(A) PM2.5 is a subset of PM10. In general, PM2.5 is assumed to be equal to PM10 as a worst case scenario. But that may not be the case for fabric filter control, since particulate control is dependent on the density of the filtering media. Also, of the air districts that were evaluated for this BACT determination, SMAQMD is the only air district that evaluates BACT for PM2.5. Therefore, no standard will be listed for PM2.5.

APPROVED BY:



DATE:

12-20-19

Attachment A

BACT No. 158

CATEGORY:

MISCELLANEOUS

BACT Size: Minor Source BACT

HD PLASMA CUTTER

BACT Determination Number:	158	BACT Determination Date:	8/1/2017
-----------------------------------	-----	---------------------------------	----------

Equipment Information

Permit Number: 24729

Equipment Description: HD PLASMA CUTTER

Unit Size/Rating/Capacity:

Equipment Location: ONETO METAL PRODUCTS CORP.
7485 REESE ROAD
SACRAMENTO, CA

BACT Determination Information

ROCs	Standard:	
	Technology Description:	
	Basis:	
NOx	Standard:	
	Technology Description:	
	Basis:	
SOx	Standard:	
	Technology Description:	
	Basis:	
PM10	Standard:	99.9%
	Technology Description:	
	Basis:	Achieved in Practice
PM2.5	Standard:	99.9%
	Technology Description:	
	Basis:	Achieved in Practice
CO	Standard:	
	Technology Description:	
	Basis:	
LEAD	Standard:	
	Technology Description:	
	Basis:	

Comments: TBACT was determined to be equivalent to BACT.

District Contact: Felix Trujillo Phone No.: (916) 874 - 7357 email: ftrujillo@airquality.org



**BEST AVAILABLE CONTROL TECHNOLOGY & TOXIC BEST AVAILABLE
CONTROL TECHNOLOGY DETERMINATION**

DETERMINATION

NO.: 158

DATE: 8/1/17

ENGINEER: Felix Trujillo, Jr.

**Category/General Equip
Description:**

Miscellaneous

Equipment Specific Description:

Plasma Arc Metal Cutting Torch

Equipment Size/Rating:

Minor Source BACT

Previous BACT Det. No.:

15

This BACT determination will update Determination #15 for plasma cutting systems.

This BACT was determined under the project for A/C 24729 (Oneto Metal Products Corp.).

BACT ANALYSIS

A: ACHIEVED IN PRACTICE (Rule 202, §205.1a)

The following control technologies are currently employed as BACT for plasma cutting systems by the following air pollution control districts and agencies:

The following control technologies have been identified and are ranked based on stringency:

District/Agency	Best Available Control Technology (BACT)/Requirements
US EPA	<u>BACT</u>
	Source: EPA RACT/BACT/LAER Clearinghouse; RBLC ID: PA-0274
	VOC No standard
	NOx The permittee shall employ effective operational control practices to minimize emissions of NOx (A)
	SOx No standard
	PM10 99.9% control efficiency
	PM2.5 99.9% control efficiency
	CO No standard
	(A) This requirement was included in Allegheny Ludlum Corporation's air quality permit for their plasma torch cutting operation (S-222), which was issued by the Allegheny County Health Department. SMAQMD Air Quality Engineer Felix Trujillo, Jr. spoke with Air Quality Engineer Michael Dorman of the ACHD on 6/6/17 regarding this condition. Mr. Dorman indicated the condition is not specifically enforceable and may be removed in the future. Therefore, this requirement will not be included as a requirement in this new BACT determination.
	<u>RULE REQUIREMENTS:</u>
	None

District/Agency	Best Available Control Technology (BACT)/Requirements														
ARB	<p><u>BACT</u> <u>Source: ARB BACT Clearinghouse</u></p> <table border="1" data-bbox="407 443 1409 688"> <tr><td colspan="2">Plasma Arc Metal Cutting Torch</td></tr> <tr><td>VOC</td><td>No standard</td></tr> <tr><td>NOx</td><td>No standard</td></tr> <tr><td>SOx</td><td>No standard</td></tr> <tr><td>PM10</td><td>No standard</td></tr> <tr><td>PM2.5</td><td>No standard</td></tr> <tr><td>CO</td><td>No standard</td></tr> </table> <p><u>RULE REQUIREMENTS:</u> None</p>	Plasma Arc Metal Cutting Torch		VOC	No standard	NOx	No standard	SOx	No standard	PM10	No standard	PM2.5	No standard	CO	No standard
Plasma Arc Metal Cutting Torch															
VOC	No standard														
NOx	No standard														
SOx	No standard														
PM10	No standard														
PM2.5	No standard														
CO	No standard														
SMAQMD	<p><u>BACT</u> <u>Source: SMAQMD BACT Guideline No. 15</u></p> <table border="1" data-bbox="407 947 1409 1192"> <tr><td colspan="2">Plasma Arc Metal Cutting Torch</td></tr> <tr><td>VOC</td><td>No standard</td></tr> <tr><td>NOx</td><td>No standard</td></tr> <tr><td>SOx</td><td>No standard</td></tr> <tr><td>PM10</td><td>99% control efficiency</td></tr> <tr><td>PM2.5</td><td>No standard</td></tr> <tr><td>CO</td><td>No standard</td></tr> </table> <p><u>RULE REQUIREMENTS:</u> None</p>	Plasma Arc Metal Cutting Torch		VOC	No standard	NOx	No standard	SOx	No standard	PM10	99% control efficiency	PM2.5	No standard	CO	No standard
Plasma Arc Metal Cutting Torch															
VOC	No standard														
NOx	No standard														
SOx	No standard														
PM10	99% control efficiency														
PM2.5	No standard														
CO	No standard														
South Coast AQMD	<p><u>BACT</u> <u>Source: SCAQMD BACT Guidelines for Non-Major Polluting Facilities, page 92</u></p> <table border="1" data-bbox="407 1440 1409 1686"> <tr><td colspan="2">Plasma Arc Metal Cutting Torch</td></tr> <tr><td>VOC</td><td>No standard</td></tr> <tr><td>NOx</td><td>No standard</td></tr> <tr><td>SOx</td><td>No standard</td></tr> <tr><td>PM10</td><td>Water table and nozzle water shroud; or electrostatic precipitator</td></tr> <tr><td>PM2.5</td><td>No standard</td></tr> <tr><td>CO</td><td>No standard</td></tr> </table> <p><u>RULE REQUIREMENTS:</u> None</p>	Plasma Arc Metal Cutting Torch		VOC	No standard	NOx	No standard	SOx	No standard	PM10	Water table and nozzle water shroud; or electrostatic precipitator	PM2.5	No standard	CO	No standard
Plasma Arc Metal Cutting Torch															
VOC	No standard														
NOx	No standard														
SOx	No standard														
PM10	Water table and nozzle water shroud; or electrostatic precipitator														
PM2.5	No standard														
CO	No standard														

District/Agency	Best Available Control Technology (BACT)/Requirements														
San Diego County APCD	<p><u>BACT</u> Source: NSR Requirements for BACT</p> <table border="1" data-bbox="402 447 1404 695"> <tr> <td colspan="2">Plasma Arc Metal Cutting Torch</td></tr> <tr> <td>VOC</td><td>No standard</td></tr> <tr> <td>NOx</td><td>No standard</td></tr> <tr> <td>SOx</td><td>No standard</td></tr> <tr> <td>PM10</td><td>No standard</td></tr> <tr> <td>PM2.5</td><td>No standard</td></tr> <tr> <td>CO</td><td>No standard</td></tr> </table> <p><u>RULE REQUIREMENTS:</u> None</p>	Plasma Arc Metal Cutting Torch		VOC	No standard	NOx	No standard	SOx	No standard	PM10	No standard	PM2.5	No standard	CO	No standard
Plasma Arc Metal Cutting Torch															
VOC	No standard														
NOx	No standard														
SOx	No standard														
PM10	No standard														
PM2.5	No standard														
CO	No standard														
Bay Area AQMD	<p><u>BACT</u> Source: BAAQMD BACT Guidelines</p> <table border="1" data-bbox="402 915 1404 1163"> <tr> <td colspan="2">Plasma Arc Metal Cutting Torch</td></tr> <tr> <td>VOC</td><td>No standard</td></tr> <tr> <td>NOx</td><td>No standard</td></tr> <tr> <td>SOx</td><td>No standard</td></tr> <tr> <td>PM10</td><td>No standard</td></tr> <tr> <td>PM2.5</td><td>No standard</td></tr> <tr> <td>CO</td><td>No standard</td></tr> </table> <p><u>RULE REQUIREMENTS:</u> None</p>	Plasma Arc Metal Cutting Torch		VOC	No standard	NOx	No standard	SOx	No standard	PM10	No standard	PM2.5	No standard	CO	No standard
Plasma Arc Metal Cutting Torch															
VOC	No standard														
NOx	No standard														
SOx	No standard														
PM10	No standard														
PM2.5	No standard														
CO	No standard														
San Joaquin Valley APCD	<p><u>BACT</u> Source: SJVUAPCD BACT Guideline 8.3.11</p> <table border="1" data-bbox="402 1442 1404 1724"> <tr> <td colspan="2">Plasma Arc Metal Cutting Torch</td></tr> <tr> <td>VOC</td><td>No standard</td></tr> <tr> <td>NOx</td><td>No standard</td></tr> <tr> <td>SOx</td><td>No standard</td></tr> <tr> <td>PM10</td><td>99.9% Control efficiency (HEPA dust collector, fabric filter baghouse, or equiv.)</td></tr> <tr> <td>PM2.5</td><td>No standard</td></tr> <tr> <td>CO</td><td>No standard</td></tr> </table> <p><u>RULE REQUIREMENTS:</u> None</p>	Plasma Arc Metal Cutting Torch		VOC	No standard	NOx	No standard	SOx	No standard	PM10	99.9% Control efficiency (HEPA dust collector, fabric filter baghouse, or equiv.)	PM2.5	No standard	CO	No standard
Plasma Arc Metal Cutting Torch															
VOC	No standard														
NOx	No standard														
SOx	No standard														
PM10	99.9% Control efficiency (HEPA dust collector, fabric filter baghouse, or equiv.)														
PM2.5	No standard														
CO	No standard														

SUMMARY OF ACHIEVED IN PRACTICE CONTROL TECHNOLOGIES	
VOC	No standard
NOx	No standard
SOx	No standard
PM10	1. 99.9% Control efficiency – [SJVAPCD, EPA BACT Clearinghouse] 2. 99% Control efficiency – [SMAQMD] 3. Water table and nozzle water shroud, or electrostatic precipitator – [SCAQMD]
PM2.5	1. 99.9% Control efficiency – [EPA BACT Clearinghouse]
CO	No standard

The following control technologies have been identified as the most stringent, achieved in practice control technologies:

BEST CONTROL TECHNOLOGIES ACHIEVED		
Pollutant	Standard	Source
VOC	No standard	
NOx	No standard	
SOx	No standard	
	99.9% control efficiency	SJVAPCD (BACT), EPA BACT Clearhouse
PM2.5	99.9% control efficiency	EPA BACT Clearinghouse
CO	No standard	

B. TECHNOLOGICALLY FEASIBLE AND COST EFFECTIVE (Rule 202, §205.1.b.):

Technologically Feasible Alternatives:

Any alternative basic equipment, fuel, process, emission control device or technique, singly or in combination, determined to be technologically feasible by the Air Pollution Control Officer.

The table below shows the technologically feasible alternatives identified as capable of reducing emissions beyond the levels determined to be "Achieved in Practice" as per Rule 202, §205.1.a.

VOC	No other technologically feasible option identified
NOx (A)	1. Selective Catalytic Reduction (SCR) 2. Selective Non-catalytic Injection (SNCR)
SOx	No other technologically feasible option identified
PM10	No other technologically feasible option identified
PM2.5	No other technologically feasible option identified
CO	No other technologically feasible option identified

- (A) Staff reviewed the April 2017 BACT determination for Vulcraft-A Division of Nucor Corporation (1875 West Highway 13 South Brigham City, Utah 84302) and concurred with their determination that a flex duct capture system with an ESP or fume collector would not be cost effective NOx control technology for a plasma cutter. Although ESP systems are typically used for controlling particulate matter, it is possible to control NOx by injecting activated carbon dust or a slurry of powdered limestone and aqueous ammonia and using the EPS to capture the particulate matter that is adsorbed in the carbon or reacted with the ammonia. This is a very expensive and complicated technology and thus not feasible for small applications such as plasma cutters.

None of the above technologies are technologically feasible, since they both require elevated exhaust gas temperatures. Although plasma cutting occurs at high temperatures, high volumes of air are necessarily exhausted by the collection system to capture the particulate matter (fume) generated by the process. The resulting gas stream is near ambient temperatures and several hundreded degrees Fahrenheit lower than the temperatures needed for SCR and NSCR.

C. SELECTION OF BACT:

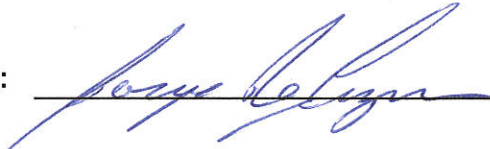
BACT for PM10 and NOx will remain at what is currently achieved in practice.

Plasma Arc Metal Cutting Torch		
Pollutant	Standard	Source
VOC	No standard	
NOx	No standard	
SOx	No standard	
PM10	99.9% control efficiency	SJVAPCD (BACT) EPA BACT Clearinghouse
PM2.5	99.9% control efficiency	EPA BACT Clearinghouse
CO	No standard	

D. SELECTION OF T-BACT:

Toxics are in the form of PM matter. The control of particulate matter through meeting the BACT standard will also control toxics found in the PM. Therefore meeting the BACT controls for the control of PM will be considered equivalent to meeting T-BACT requirements (as determined in the SJVAPCD's BACT determination No. 8.3.4 – Plasma Arc Cutting Torch).

REVIEWED BY: _____ DATE: _____

APPROVED BY:  _____ DATE: 8/4/17

Attachment A

BACT Determinations Referenced



https://cfpub.epa.gov/rblc/index.cfm?action=PermitDetail.ProcessInfo&facility_id=27094&PROCESS_ID=107501
Last updated on 2/22/2017

Technology Transfer Network

Clean Air EPA Action Office and Resource Center
RACT/BACT/LAER Clearinghouse RBLC Basic Search RBLC Search Results Process Information - Details

Process Information - Details

For information about the pollutants related to this process, click on the specific pollutant in the list below.

[RACT/BACT/LAER Clearinghouse](#) [Basic Search](#) [Search Results](#) [Facility Information](#) [Process List](#) [Process Information](#)

[Help](#)

FINAL

RBLC ID: PA-0274

Corporate/Company: ALLEGHENY LUDLUM CORPORATION

Facility Name: ALLEGHENY LUDLUM CORPORATION - BRACKENRIDGE FACILITY

Process: PLASMA TORCH CUTTING OPERATION (S-222)

Pollutant Information - List of Pollutants

[Help](#)

	Pollutant	Primary Emission Limit	Basis	Verified
Primary Fuel:				
Throughput:				
Process Code:				
30000.00 T/YR SPECIALTY STEEL PRODUCTS	Nitrogen Oxides (NOx)	0.7900 LB/H	BACT-PSD	NO
81.390	Particulate matter, filterable < 10 µ (FPM10)	0.0100 LB/H	BACT-PSD	NO
	Particulate matter, filterable < 2.5 µ (FPM2.5)	0.0100 LB/H	BACT-PSD	NO
	Particulate Matter (PM)	0.0100 LB/H	BACT-PSD	NO
	Visible Emissions (VE)	10.0000 % OPACITY FROM STACK	BACT-PSD	NO

Process Notes: THIS UNIT IS EQUIPPED WITH A BAGHOUSE.

https://cfpub.epa.gov/rblc/index.cfm?action=PermitDetail.ProcessInfo&facility_id=27094... 2/22/2017

https://cfpub.epa.gov/rblc/index.cfm?action=PermitDetail.PollutantInfo&Facility_ID=27094&Process_ID=107501&Pollutant_ID=1493&Per_Control_Equipment_Id=14688



Technology Transfer Network

Clean Air Technology Center (CATC) RACT/BACT/LAER Clearinghouse
Clearinghouse RBLC Basic Search RBLC Search Results Pollutant Information

Updated on 2/22/2017

Pollutant Information

Click on the Process Information button to see more information about the process associated with this pollutant.
Or click on the Process List button to return to the list of processes.



Help
FINAL

RBLC ID: PA-0274

Corporate/Company: ALLEGHENY LUDLUM CORPORATION

Facility Name: ALLEGHENY LUDLUM CORPORATION - BRACKENRIDGE FACILITY

Process: PLASMA TORCH CUTTING OPERATION (S-222)

Pollutant: Nitrogen Oxides (NOx)

CAS Number: 10102

Pollutant Group(s): Inorganic Compounds, Oxides
of Nitrogen (NOx),
Particulate Matter (PM),

Substance Registry System: Nitrogen Oxides (NOx)

Pollution Prevention/Add-on Control Equipment/Both/No Controls Feasible: P

P2/Add-on Description: THE PERMITTEE SHALL EMPLOY EFFECTIVE OPERATIONAL CONTROL PRACTICES
TO MINIMIZE EMISSIONS OF NOX.

Test Method:

Unspecified

EPA/OAR Methods All Other Methods

Percent Efficiency:

0

Compliance Verified:

No

EMISSION LIMITS:

Case-by-Case Basis:

BACT-PSD

Other Applicable Requirements:

Other Factors Influence Decision: No

Emission Limit 1:

0.7900 LB/H

Emission Limit 2:

3.4600 T/YR

Standard Emission Limit:

0

COST DATA:

Cost Verified?

No

Dollar Year Used in Cost Estimates:

Cost Effectiveness:

0 \$/ton

Incremental Cost Effectiveness:

0 \$/ton

Pollutant Notes:

https://cfpub.epa.gov/rblc/index.cfm?action=PermitDetail.PollutantInfo&Facility_ID=270... 2/22/2017

https://cfpub.epa.gov/rblc/index.cfm?action=PermitDetail.PollutantInfo&Facility_ID=27094&Process_ID=107501&Pollutant_ID=1718&Per_Control_Equipment_Id=140656

Last updated on 2/22/2017



Technology Transfer Network

Clean Air Act of 1970, Title I, Section 111, (b)(1)(C) - Technology Transfer Network
[Clearinghouse](#) [RBLC Basic Search](#) [RBLC Search Results](#) [Pollutant Information](#) [Clean Air Technology Center](#) [RACT/BACT/LAER](#)

Pollutant Information

Click on the **Process Information** button to see more information about the process associated with this pollutant.
 Or click on the **Process List** button to return to the list of processes.



Help

FINAL

RBLC ID: PA-0274

Corporate/Company: ALLEGHENY LUDLUM CORPORATION

Facility Name: ALLEGHENY LUDLUM CORPORATION - BRACKENRIDGE FACILITY

Process: PLASMA TORCH CUTTING OPERATION (S-222)

Pollutant: Particulate matter,
 filterable < 10 µ (FPM10)

CAS Number: PM

Pollutant Group(s): Particulate Matter (PM),

Substance Registry System: Particulate matter, filterable < 10 µ (FPM10)

Pollution Prevention/Add-on Control Equipment/Both/No Controls Feasible: A

P2/Add-on Description: EMISSIONS OF PM10 FROM THE PLASMA TORCH CUTTING OPERATION SHALL BE CONTROLLED BY A BAGHOUSE WITH A MINIMUM OVERALL CONTROL EFFICIENCY OF 99.9%.

Test Method:

Unspecified

EPA/QAR Methods

All Other Methods

Percent Efficiency: 99.900

Compliance Verified: No

EMISSION LIMITS:

Case-by-Case Basis: BACT-PSD

Other Applicable Requirements:

Other Factors Influence Decision: No

Emission Limit 1: 0.0100 LB/H

Emission Limit 2: 0.0400 T/YR

Standard Emission Limit: 0

COST DATA:

Cost Verified: No

Dollar Year Used in Cost Estimates:

Cost Effectiveness: 0 \$/ton

Incremental Cost Effectiveness: 0 \$/ton

Pollutant Notes:

https://cfpub.epa.gov/rblc/index.cfm?action=PermitDetail.PollutantInfo&Facility_ID=270... 2/22/2017

https://cfpub.epa.gov/rblc/index.cfm?action=PermitDetail.PollutantInfo&Facility_ID=27094&Process_ID=107501&Pollutant_ID=306&Per_Control_Equipment_Id=146457



Technology Transfer Network

Clean Air EPA Pollution Prevention & Control Technology Transfer Network | Clean Air Technology Center | RACT/BACT/LAER Clearinghouse | [RBLC Basic Search](#) | [RBLC Search Results](#) | [Pollutant Information](#)

Last updated on 2/22/2017

Pollutant Information

Click on the Process Information button to see more information about the process associated with this pollutant.
Or click on the Process List button to return to the list of processes.

[RBLC Home](#) [Basic Search](#) [Search Results](#) [Facility Information](#) [Pollutant Info](#) [Process Information](#)
[Pollutant Information](#)

[Help](#)
FINAL

RBLC ID: PA-0274

Corporate/Company: ALLEGHENY LUDLUM CORPORATION

Facility Name: ALLEGHENY LUDLUM CORPORATION - BRACKENRIDGE FACILITY

Process: PLASMA TORCH CUTTING OPERATION (S-222)

Pollutant: Particulate matter,
filterable < 2.5 μ (FPM2.5)

CAS Number: PM

Pollutant Group(s): Particulate Matter (PM),

Substance Registry System: Particulate matter, filterable <
2.5 μ (FPM2.5)

Pollution Prevention/Add-on Control Equipment/Both/No Controls Feasible: A

P2/Add-on Description: EMISSIONS OF PM2.5 FROM THE PLASMA TORCH CUTTING OPERATION SHALL BE CONTROLLED BY A BAGHOUSE WITH A MINIMUM OVERALL CONTROL EFFICIENCY OF 99.9%.

Test Method:

Unspecified

[EPA/OAR Methods](#)

[All Other Methods](#)

Percent Efficiency: 99.900

Compliance Verified: No

EMISSION LIMITS:

Case-by-Case Basis: BACT-PSD

Other Applicable Requirements:

Other Factors Influence Decision: No

Emission Limit 1: 0.0100 LB/H

Emission Limit 2: 0.0400 T/YR

Standard Emission Limit: 0

COST DATA:

Cost Verified? No

Dollar Year Used in Cost Estimates:

Cost Effectiveness: 0 \$/ton

Incremental Cost Effectiveness: 0 \$/ton

Pollutant Notes:

https://cfpub.epa.gov/rblc/index.cfm?action=PermitDetail.PollutantInfo&Facility_ID=270... 2/22/2017



https://cfpub.epa.gov/rblc/index.cfm?action=PermitDetail.ProcessInfo&facility_id=26884&PROCESS_ID=106766
Last updated on 2/22/2017

Technology Transfer Network

Clean Air Act Information / RACT/BACT/LAER Clearinghouse / RBLC Basic Search / RBLC Search Results / Process Information - Details

Process Information - Details

For information about the pollutants related to this process, click on the specific pollutant in the list below.

[Home](#) [New Search](#) [Search Results](#) [Facility Information](#) [Process List](#) [Process Information](#)

[Help](#)

FINAL

RBLC ID: OH-0316
Corporate/Company: V & M STAR
Facility Name: V & M STAR
Process: PLASMA ARC TORCH

Pollutant Information - List of Pollutants

[Help](#)

Primary Fuel:
Throughput: 1900.00 ACFM
Process Code: 81.290

Pollutant	Primary Emission Limit	Basis	Verified
<u>Particulate matter, filterable < 10 µ (FPM10)</u>	0.1600 LB/H	BACT-PSD	NO
<u>Visible Emissions (VE)</u>	20.0000 %	Other Case-by-Case	NO

Process Notes: TORCH CUTS THE SEAMLESS PIPE TO SIZE FOR DELIVERY THE APPLICATION DOES NOT DEFINE THE TORCH FUEL.

https://cfpub.epa.gov/rblc/index.cfm?action=PermitDetail.ProcessInfo&facility_id=26884... 2/22/2017

https://cfpub.epa.gov/rblc/index.cfm?action=PermitDetail.PollutantInfo&Facility_ID=26884&Process_ID=106766&Pollutant_ID=1718&Per_Control_Equipment_ID=142319



Technology Transfer Network

Clean Air Technology Center
[Clearinghouse](#) [RBLC Basic Search](#) [RBLC Search Results](#) [Pollutant Information](#) [Clean Air Technology Center](#) [RACT/BACT/LAER](#)

Pollutant Information

Click on the Process Information button to see more information about the process associated with this pollutant.
 Or click on the Process List button to return to the list of processes.

[RBLC Home](#) [New Search](#) [Search Results](#) [Pollutant Information](#) [Process List](#) [Process Information](#)
[Pollutant Information](#)

[Help](#)
FINAL

RBLC ID: OH-0316
Corporate/Company: V & M STAR
Facility Name: V & M STAR
Process: PLASMA ARC TORCH

Pollutant: Particulate matter,
 filterable < 10 µ (PFM10)

CAS Number: PM

Pollutant Group(s): Particulate Matter (PM),

Substance Registry System: Particulate matter, filterable <
 10 µ (PFM10)

Pollution Prevention/Add-on Control Equipment/Both/No Controls Feasible: A

P2/Add-on Description: PULSE JET FABRIC FILTER BAGHOUSE

Test Method: Unspecified [EPA/OAR Methods](#) [All Other Methods](#)

Percent Efficiency: 0
Compliance Verified: No

EMISSION LIMITS:

Case-by-Case Basis: BACT-PSD
Other Applicable Requirements: SIP
Other Factors Influence Decision: Unknown
Emission Limit 1: 0.1600 LB/H
Emission Limit 2: 0.7100 T/YR AS A ROLLING 12-MONTH SUMMATION
Standard Emission Limit: 0.0100 GR/DSCF

COST DATA:

Cost Verified? No
Dollar Year Used in Cost Estimates:
Cost Effectiveness: 0 \$/ton
Incremental Cost Effectiveness: 0 \$/ton
Pollutant Notes:

https://cfpub.epa.gov/rblc/index.cfm?action=PermitDetail.PollutantInfo&Facility_ID=268... 2/22/2017

SMAQMD BACT CLEARINGHOUSE

CATEGORY:

APC - MISCELLANEOUS

BACT Size:

APC CARBON ABSORPTION DRUM

BACT Determination Number: 15	BACT Determination Date: 8/18/2003
--------------------------------------	---

Equipment Information**Permit Number:** 17103**Equipment Description:** APC CARBON ABSORPTION DRUM**Unit Size/Rating/Capacity:** PLASMA CUTTING**Equipment Location:** ONETO METAL PRODUCTS CORP.
7485 REESE ROAD
SACRAMENTO, CA**BACT Determination Information**

ROCs	Standard:	NA
	Technology Description:	NA
	Basis:	
NOx	Standard:	DRY PLASMA CUTTING
	Technology Description:	DRY PLASMA CUTTING
	Basis:	Achieved in Practice
SOx	Standard:	NA
	Technology Description:	NA
	Basis:	
PM10	Standard:	90% CAPTURE 99% CONTROL
	Technology Description:	BAGHOUSE/FABRIC FILTER AND COLLECTION SYSTEM
	Basis:	Achieved in Practice
PM2.5	Standard:	
	Technology Description:	
	Basis:	
CO	Standard:	NA
	Technology Description:	NA
	Basis:	
LEAD	Standard:	
	Technology Description:	
	Basis:	

Comments:**District Contact:** Allan Daly **Phone No.:** N/A **email:** N/A

Printed: 6/4/2015

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 8.3.4*

Last Update: 2/5/2003

**Metal Parts and Product Fabrication - Plasma Arc
Cutting Torch**

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
PM10	Electrostatic Precipitator or Dust Collector with a HEPA Filter (99.9% efficiency)		

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*
10-20-2000 Rev. 0

Equipment or Process: Plasma Arc Metal Cutting Torch

Rating/Size	Criteria Pollutants				
	VOC	NOx	SOx	CO	PM ₁₀
> 30 KVA Electrical Input					Water Table and Nozzle Water Shroud; or Electrostatic Precipitator (1988)
					Inorganic

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions
BACT Guidelines - Part D

Plasma Arc Metal Cutting Torch