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## DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: Self Initiated Inspection

FACILITY: C & S Steel		SRN / ID: U291701964
LOCATION: 301 Industrial Parkway, Ithaca		DISTRICT: Lansing
CITY: Ithaca		COUNTY: GRATIOT
CONTACT: Jim Hirschman, Owner		ACTIVITY DATE: 02/02/2017
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: self-initiated complia	nce inspection as the result of an EPA referral	······································
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow Personnel present: Jim Hirschman, Owner (jim@candssteel.com)

### Purpose:

Perform an unannounced, self-initiated compliance inspection in response to a referral from EPA's Section Chief for MI/WI Air Enforcement and Compliance Assurance Branch, Sarah Marshall via email on July 5, 2016. The email contained an anonymous complaint concerning C&S Steel (see attached for referral email): the complainant claims there is a newly constructed paint booth with improper filtration and ventilation. Paint overspray is being vented directly to the atmosphere. Other issues were raised concerning building code inspections and violations as well.

### **Facility Background:**

C & S Steel is housed in what used to be Ithaca Coatings (unregistered number U29145153 in MACES), 301 Avenue B – Industrial Parkway in Ithaca, last inspected in 2014. Jim Hirschman, owner, said that C & S Steel has been at this location since March 2016. They are a fabrication and machine shop of steel parts, particularly manufacturing and painting of trailers.

### Inspection:

At approximately 8:40 a.m. on August 18, 2016 I arrived at C & S Steel to follow-up on the EPA referral and to meet with the plant contact to conduct an inspection, but was informed that both potential contacts were out of town at a meeting. I explained the reason why I was there and said that I would return at a later date.

On February 2, 2017 I returned to C & S Steel at approximately 12:45 p.m. and met with C & S Steel owner, Jim Hirschman. I explained to him that I was there to see what types of equipment they had present at the facility since I had not inspected this facility location since 2014. I provided him with my business card and a July 2014 Permit to Install (PTI) Exemption handbook, but emailed him a link to the new January 2017 PTI exemption handbook.

# Exemption Rule 285(2)(I)(vi)

The steel is processed via welding, plasma cutting, milling and turning, shot blasting and surface coating. The welders are exempt from a permit to install per exemption Rule 336.1285(i) (Rule 285(i)) for brazing, soldering, welding or plasma coating equipment.

The milling, turning, plasma cutting and shot blasting of the steel would be exempt under Rule 285(2)(I)(vi), as long as at least one of the following are met: (a)equipment is used on a nonproduction basis, (b)equipment emissions are released only to the general in-plant environment, or (c)equipment that has externally vented emissions controlled by an appropriately designed and operated fabric filter collector that, for all specified operations with metal, is preceded by a mechanical precleaner.

The milling and turning units are vented only to the general in-plant environment. The plasma cutting unit has a cartridge dust collector which vents outside during the summer months and inside during the winter months to conserve heat. These would both be meet the Rule 285(2)(I)(vi) exemption.

The shot blasting equipment is located in a booth with wall vents near the floor (considered a mechanical precleaner) prior to the remaining blasting media/particulate being exhausted outside. Attached is a photo of the fabric filter collection unit. The ventilation duct exits the building horizontally and goosenecks downward where a wooden box staged on the ground collects the particulate. During the inspection the box was not located below the ventilation duct and I saw fine gray particulate from the shot blasting ventilation duct was on the snow underneath the duct. J. Hirschman explained that the box is usually in place below the ventilation duct.

I explained to him that in order to meet the Rule 285(2)(I)(vi) exemption, an appropriately designed and operated fabric filter must be used to collect the particulate. He offered the suggestion to attach a fabric filter from the exhaust exit to the box in

order to collect the particulate. I also suggested that in addition to installing a fabric filter, that a sign be place on the box indicating that it should not be removed from its location.

On 4/7/17 I received photographs of the exhaust ventilation with a fabric filter connected to the exhaust and to the collection box (see attached photos). I will return during this fiscal year to verify that this fabric filter collector is sufficient for capturing and controlling particulate from the shot blasting process. J. Hirschman said that to clean the collection bin, they remove the fabric filters and dispose of them in a plastic trash bag which is then disposed in a dumpster. The blast material that has been collected is either reused or is removed from the box with a loader tractor to dispose of the particulate into a dumpster. This will also be looked into further at a future site visit, to ensure that the particulate dumped into the dumpster is not being reentrained into the ambient air.

Note in the photos that the particulate which was exhausted to ambient air without filtration is still present on the property. I requested that the particulate be cleaned up. J. Hirschman responded saying that it had been raining for quite a few days but will clean the particulate up when the rain stops. I will verify this has been done at the future site visit.

At this time I will not issue a violation notice, pending the future site visit in which I verify that the particulate control device is operating properly.

### Exemption Rule 287(2)(c)

In order to check compliance with the Rule 287(2)(c) exemption limit of 200 gallons of coating used (minus water) per month, I asked J. Hirschman to provide me with purchase orders for the months of December 2016 and January 2017 (attached), as he does not keep record of coatings used on a monthly basis. Purchase order records are sufficient to determine compliance with Rule 287(2)(c).

In December 14.5 gallons of coating were purchased; in January 93.1 gallons of coating were purchased. Assuming worstcase that all paint purchased within those months was used, and assuming worst-case that there is no water in these coatings, C & S equipment is in compliance with the coating usage limit of 200 gallons per month minus water.

During the inspection I noted that there were no filters in place in the paint booth; however, J. Hirschman said that the filters were being replaced; that they had just thrown the old filters out and were putting new ones in. He explained that an alarm will go off when the air flow slows below a certain rate as the result of the filters becoming too saturated with particulate.

Based on fabric filter usage and coating records, C & S Steel is in compliance with the conditions of exemption Rule 287(2) (c), and is therefore operating the paint booth in accordance with state rules.

**Compliance Statement:** C & S Steel is in compliance at this time; however a follow-up inspection will be conducted to ensure that the installed fabric filter dust collector is operating properly (i.e. shot blasting dust is no longer present on the ground).



Image 1(Fabric Filter) : Fabric filter attached to exhaust which funnels particulate into wooden box.



Image 2(Fugitive Dust) : Note blast media on ground (grayish in color).

NAME MURINA LOW DATE 4/14/17 SUPERVISOR