

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

N517330505

| | | |
|---|-------------------------------|---------------------------|
| FACILITY: NELSON PAINT CO | | SRN / ID: N5173 |
| LOCATION: ONE NELSON DR, KINGSFORD | | DISTRICT: Upper Peninsula |
| CITY: KINGSFORD | | COUNTY: DICKINSON |
| CONTACT: Douglas Wiegel , Regulatory Compliance Manager | | ACTIVITY DATE: 08/06/2015 |
| STAFF: Ed Lancaster | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MINOR |
| SUBJECT: Conducted unannounced compliance inspection. | | |
| RESOLVED COMPLAINTS: | | |

I arrived at Nelson Paint and was introduced to Mr. Douglas Wiegel, Safety and Compliance Manager for Nelson Paint. Mr. Wiegel recently took over the environmental compliance duties.

We began the inspection by going over the recordkeeping requirements of the Company's Air Use Permit No. 354-93A. Mr. Wiegel provided me with a spreadsheet of the VOC emissions from January 2011 through June 30, 2015. Mr. Wiegel said he submits the raw material used at the plant (Special Condition (SC) No. 6) to a consultant that provides him with the spreadsheet of their VOC emissions (see below). The company is in compliance with their annual VOC limit of 11 tons per year; however the spreadsheet did not provide the pound per hour limit. Mr. Wiegel said they do not work overtime, only 8 hours per day, Monday through Friday; therefore, the maximum hours worked per year would be 2080. Based on this information and using the highest annual VOC emissions reported over the last five years (5.77 tons in February 2013) the company has an hourly VOC emission rate of 5.55 pounds (SC No. 1).

The company maintains a small baghouse on the roof of the building to capture PM emissions (SC Nos. 2 and 5). Mr. Wiegel said the company recently replaced the baghouse fan motor which was the only major repair they have had to do to the unit. The baghouse has a small tray under the bags to collect the captured PM. The tray is about 18 inches by 30 inches by 4 inches deep. There was very little accumulated dust in the unit during my inspection. A visual inspection of the structure housing the baghouse and the surrounding roof area showed no signs of fallout or holes in the bags. The PM captured by the baghouse is mostly paint pigments so it is expected if there was a malfunction with the baghouse it would be readily observable on the roof and the neighboring businesses. No VEs were observed during the inspection (SC No. 3).

During the inspection only two mixers were in operation. One mixer was producing a latex paint the other a solvent based paint. I could not detect any odors from the process and both mixers had their covers in place (SC No. 4). The covers are round sheets of metal with a U-shaped opening to allow the mixer rod access. A large section of flexible duct (approximately 6 to 8 inches in diameter) is placed near the opening to capture the fumes and particulate.

At the time of the inspection the company appeared to be in compliance with their permit and the Air Quality Rules.

NAME Ed Lancaster DATE 8/24/15 SUPERVISOR _____

Nelson Paint Company
 Monthly Air Permit Records
 Michigan DEQ - Air Use Permit # 354-93A
 For 2015 - YTD through 6/30/2015

Rec'd 8/6/15 from
 Doug w.
 EJJ

VOC Emissions
 Alternative Emission Factor
 Based on Solvent Use

Records Required by Permit Conditions

| Month/Year | Solvent Used - pounds | Pigment Usage - pounds | Paint Produced (all types) - pounds | Total VOC Emissions - Tons | VOC - 12 Month Rolling Time Period - Tons (Limit is 11 TPY) | In Compliance With Rolling Average Limit Yes/No |
|------------|-----------------------|------------------------|-------------------------------------|----------------------------|---|---|
| Feb-11 | 18,582 | 4,474 | 47,939 | 0.36 | 4.88 | Yes |
| Mar-11 | 22,536 | 5,340 | 49,322 | 0.37 | 4.93 | Yes |
| Apr-11 | 23,037 | 6,093 | 56,082 | 0.42 | 4.95 | Yes |
| May-11 | 24,868 | 6,919 | 63,557 | 0.48 | 4.90 | Yes |
| Jun-11 | 21,445 | 5,523 | 55,525 | 0.42 | 4.92 | Yes |
| Jul-11 | 32,352 | 6,918 | 69,967 | 0.52 | 5.01 | Yes |
| Aug-11 | 17,621 | 3,671 | 45,294 | 0.34 | 4.81 | Yes |
| Sep-11 | 27,770 | 14,335 | 77,568 | 0.58 | 5.08 | Yes |
| Oct-11 | 18,275 | 4,650 | 46,840 | 0.35 | 4.88 | Yes |
| Nov-11 | 13,708 | 4,000 | 53,645 | 0.40 | 4.88 | Yes |
| Dec-11 | 15,448 | 4,752 | 33,682 | 0.25 | 4.77 | Yes |
| Jan-12 | 19,225 | 4,554 | 46,721 | 0.35 | 4.85 | Yes |
| Feb-12 | 23,167 | 4,993 | 52,525 | 0.39 | 4.88 | Yes |
| Mar-12 | 22,126 | 5,771 | 56,862 | 0.43 | 4.94 | Yes |
| Apr-12 | 29,819 | 6,531 | 62,861 | 0.47 | 4.99 | Yes |
| May-12 | 25,441 | 7,233 | 65,218 | 0.49 | 5.00 | Yes |
| Jun-12 | 31,373 | 8,759 | 85,045 | 0.64 | 5.22 | Yes |
| Jul-12 | 20,950 | 12,083 | 60,444 | 0.45 | 5.15 | Yes |
| Aug-12 | 22,305 | 27,214 | 90,781 | 0.68 | 5.49 | Yes |
| Sep-12 | 29,366 | 9,614 | 74,173 | 0.56 | 5.47 | Yes |
| Oct-12 | 19,451 | 10,056 | 46,191 | 0.35 | 5.46 | Yes |
| Nov-12 | 38,980 | 7,364 | 95,451 | 0.72 | 5.77 | Yes |
| Dec-12 | 41,026 | 3,913 | 51,795 | 0.39 | 5.91 | Yes |
| Jan-13 | 23,887 | 6,825 | 65,613 | 0.49 | 6.05 | Yes |
| Feb-13 | 34,772 | 8,049 | 95,476 | 0.72 | 6.37 | Yes |
| Mar-13 | 22,300 | 5,382 | 197,081 | 1.48 | 7.43 | Yes |
| Apr-13 | 12,005 | 5,944 | 36,834 | 0.28 | 7.23 | Yes |
| May-13 | 17,934 | 5,855 | 46,829 | 0.35 | 7.09 | Yes |
| Jun-13 | 15,715 | 3,762 | 42,173 | 0.32 | 6.77 | Yes |
| Jul-13 | 22,907 | 5,407 | 64,964 | 0.49 | 6.81 | Yes |
| Aug-13 | 37,403 | 8,233 | 97,984 | 0.73 | 6.86 | Yes |
| Sep-13 | 23,625 | 5,132 | 58,066 | 0.44 | 6.74 | Yes |
| Oct-13 | 22,670 | 5,957 | 55,790 | 0.42 | 6.81 | Yes |
| Nov-13 | 18,113 | 4,362 | 38,818 | 0.29 | 6.39 | Yes |
| Dec-13 | 24,549 | 4,871 | 63,378 | 0.48 | 6.47 | Yes |
| Jan-14 | 13,182 | 3,141 | 32,792 | 0.25 | 6.23 | Yes |
| Feb-14 | 21,623 | 1,585 | 30,412 | 0.23 | 5.74 | Yes |
| Mar-14 | 12,646 | 3,591 | 33,157 | 0.25 | 4.51 | Yes |
| Apr-14 | 20,619 | 4,828 | 52,377 | 0.39 | 4.63 | Yes |
| May-14 | 17,513 | 3,461 | 73,545 | 0.55 | 4.83 | Yes |
| Jun-14 | 21,443 | 6,352 | 58,296 | 0.44 | 4.95 | Yes |
| Jul-14 | 17,763 | 5,386 | 40,654 | 0.30 | 4.76 | Yes |
| Aug-14 | 22,901 | 3,579 | 58,290 | 0.44 | 4.47 | Yes |
| Sep-14 | 20,137 | 6,932 | 58,754 | 0.44 | 4.47 | Yes |
| Oct-14 | 17,795 | 4,389 | 47,268 | 0.35 | 4.41 | Yes |
| Nov-14 | 22,633 | 5,159 | 71,067 | 0.53 | 4.65 | Yes |
| Dec-14 | 18,877 | 5,100 | 50,792 | 0.38 | 4.56 | Yes |
| Jan-15 | 22,238 | 5,341 | 60,743 | 0.46 | 4.77 | Yes |
| Feb-15 | 23,291 | 6,655 | 63,889 | 0.48 | 5.02 | Yes |
| Mar-15 | 16,461 | 4,888 | 45,174 | 0.34 | 5.11 | Yes |
| Apr-15 | 28,953 | 6,608 | 75,937 | 0.57 | 5.28 | Yes |
| May-15 | 25,037 | 6,876 | 86,469 | 0.65 | 5.38 | Yes |
| Jun-15 | 20,657 | 4,642 | 50,420 | 0.38 | 5.32 | |
| Jul-15 | 16,920 | 6,595 | 46,735 | 0.35 | 5.37 | |
| Aug-15 | | | | 0.00 | 4.93 | |
| Sep-15 | | | | 0.00 | 4.49 | |
| Oct-15 | | | | 0.00 | 4.13 | |
| Nov-15 | | | | 0.00 | 3.60 | |
| Dec-15 | | | | 0.00 | 3.22 | |

| Total VOC Emissions - Tons | VOC - 12 Month Rolling Time Period Tons (Limit is 11 TPY) |
|----------------------------|---|
| 0.32 | 4.74 |
| 0.38 | 4.85 |
| 0.39 | 4.87 |
| 0.42 | 4.84 |
| 0.36 | 4.81 |
| 0.55 | 4.87 |
| 0.30 | 4.66 |
| 0.47 | 4.70 |
| 0.31 | 4.52 |
| 0.23 | 4.31 |
| 0.26 | 4.27 |
| 0.33 | 4.33 |
| 0.39 | 4.41 |
| 0.38 | 4.40 |
| 0.51 | 4.52 |
| 0.43 | 4.53 |
| 0.53 | 4.70 |
| 0.36 | 4.50 |
| 0.38 | 4.58 |
| 0.50 | 4.61 |
| 0.33 | 4.63 |
| 0.66 | 5.06 |
| 0.70 | 5.49 |
| 0.41 | 5.57 |
| 0.59 | 5.77 |
| 0.38 | 5.77 |
| 0.20 | 5.47 |
| 0.30 | 5.34 |
| 0.27 | 5.08 |
| 0.39 | 5.11 |
| 0.64 | 5.37 |
| 0.40 | 5.27 |
| 0.39 | 5.32 |
| 0.31 | 4.97 |
| 0.42 | 4.89 |
| 0.22 | 4.51 |
| 0.37 | 4.28 |
| 0.21 | 4.12 |
| 0.35 | 4.27 |
| 0.30 | 4.26 |
| 0.36 | 4.36 |
| 0.30 | 4.27 |
| 0.39 | 4.02 |
| 0.34 | 3.96 |
| 0.30 | 3.88 |
| 0.38 | 3.96 |
| 0.32 | 3.86 |
| 0.38 | 4.02 |
| 0.40 | 4.04 |
| 0.28 | 4.11 |
| 0.49 | 4.25 |
| 0.43 | 4.38 |
| 0.35 | 4.36 |
| 0.29 | 4.35 |
| 0.00 | 3.96 |
| 0.00 | 3.62 |
| 0.00 | 3.32 |
| 0.00 | 2.93 |
| 0.00 | 2.61 |
| 0.00 | 2.23 |

- Notes:
- "Paint Produced" includes all types of paints and solvent repackaged.
 - "Total VOC Emissions - Tons" is calculated using the total paint produced (as defined above) and applying a facility wide emission factor of 30% of VOC per ton of paint produced.
 - The "VOC 12 Month Rolling Time Period" is calculated by totaling the emissions for the 12 month period ending each month.

NOTE: 2003 data submitted to MDEQ by Doyle on 2/11/2004
 NOTE: Changed VOC...Ave. title from "VOC - 12 Month Rolling Ave. Tons (Limit is 11 TPY)" TO "VOC - 12 Month Rolling Time Period Tons (Limit is 11 TPY)" based on agreement with Doyle after document was submitted to MDEQ.
 NOTE: Found an error in formula. Was totalling 13 months. Corrected March 2, 2004
 11 tpy = 0.917 ppm