# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

## IN THE MATTER OF:

Metal Management Midwest, Inc. 2500 S Paulina Street Chicago, IL 60608

#### **ATTENTION:**

Deborah Hays EHS Director. Midwest Region, Metal Management Debbie.Hays@simsmm.com

## Request to Provide Information Pursuant to the Clean Air Act

The U.S. Environmental Protection Agency is requiring Metal Management Midwest, Inc. d/b/a Sims (Sims or you) to submit certain information about the facility at 2500 S Paulina Street, Chicago, Illinois. Appendix A provides the instructions needed to answer this information request, including instructions for electronic submissions. Appendix B specifies the information that you must submit. You must send this information to us according to the schedule in Appendix B.

We are issuing this information request under Section 114(a) of the Clean Air Act (the CAA), 42 U.S.C. § 7414(a). Section 114(a) authorizes the Administrator of EPA to require the submission of information. The Administrator has delegated this authority to the Director of the Enforcement and Compliance Assurance Division, Region 5.

Sims owns and operates an emission source at the 2500 S Paulina Street, Chicago, Illinois facility. We are requesting this information to determine whether your emission source is complying with the Clean Air Act and Illinois State Implementation Plan.

At this time, EPA Region 5 is not accepting any hard-copy document deliveries. If possible, we ask Sims to upload all required information to the secured web-link shared with you at the time you received this request. If you did not receive a web-link, or if you are having technical difficulties, you must contact Karina Kuc at kuc.karina@epa.gov or 312-353-5090 to make arrangements to submit your response.

Sims must submit all required information under an authorized signature with the following certification:

I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(2) of the Clean Air Act and 18 U.S.C. §§ 1001 and 1519.

You may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B for any part of the information you submit to us. Information subject to a business confidentiality claim is available to the public only to the extent, and by means of the procedures, set forth at 40 C.F.R. Part 2, Subpart B. If you do not assert a business confidentiality claim when you submit the information, EPA may make this information available to the public without further notice.

This information request is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 et seq., because it seeks collection of information from specific individuals or entities as part of an administrative action or investigation.

We may use any information submitted in response to this request in an administrative, civil or criminal action.

Failure to comply fully with this information request may subject Sims to an enforcement action under Section 113 of the CAA, 42 U.S.C. § 7413.

You should direct any questions about this information request to Christopher Grubb at Grubb.Christopher@epa.gov or 312-886-7187.

MICHAEL HARRIS Digitally signed by MICHAEL HARRIS Date: 2022.04.21 15:51:18 -05'00'

Michael D. Harris Division Director Enforcement and Compliance Assurance Division

# Appendix A

When providing the information requested in Appendix B, use the following instructions and definitions.

#### **Instructions**

- 1. Provide a separate narrative response to each question and subpart of a question set forth in Appendix B.
- 2. Precede each answer with the number of the question to which it corresponds and, at the end of each answer, identify the person(s) who provided information used or considered in responding to that question, as well as each person consulted in the preparation of that response.
- 3. Indicate on each document produced, or in some other reasonable manner, the number of the question to which it corresponds.
- 4. When a response is provided in the form of a number, specify the units of measure of the number in a precise manner.
- 5. Where information or documents necessary for a response are neither in your possession nor available to you, indicate in your response why the information or documents are not available or in your possession, and identify any source that either possesses or is likely to possess the documents or information.
- 6. If information not known or not available to you as of the date of submission later becomes known or available to you, you must supplement your response. Moreover, should you find at any time after the submission of your response that any portion of the submitted information is false or incorrect, you must notify EPA as soon as possible.

#### **Electronic Submissions**

To aid in our electronic recordkeeping efforts, we request that you provide all documents responsive to this information request in an electronic format according to paragraphs 1 through 6, below. These submissions are in lieu of hard copy.

- 1. Provide all responsive documents in Portable Document Format (PDF) or similar format, unless otherwise requested in specific questions. If the PDFs are scanned images, perform at least Optical Character Recognition (OCR) for "image over text" to allow the document to be searchable. Submitters providing secured PDFs should also provide unsecured versions for EPA use in repurposing text.
- 2. When specific questions request data in electronic spreadsheet form, provide the data and corresponding information in editable Excel format, and not in image or PDF format. If Excel formats are not available, then the format should allow for data to be used in calculations by a standard spreadsheet program such as Excel.

- 3. Provide submissions to the secure web-link provided by EPA. Additionally, whenever a file is submitted via the secure link, send an email to the following email addresses to provide notification of the submittal: <a href="mailto:kuc.karina@epa.gov">kuc.karina@epa.gov</a>, <a href="mailto:grubb.christopher@epa.gov">grubb.christopher@epa.gov</a>.
- 4. Provide a table of contents of all electronic documents submitted in response to our request so that each document can be accurately identified in relation to your response to a specific question. We recommend the use of electronic file folders organized by question number.
- 5. Please submit documents claimed as confidential business information (CBI) in separate file folders apart from the non-confidential information. This will facilitate appropriate records management and appropriate handling and protection of the CBI.
- 6. Certify that the attached files have been scanned for viruses and indicate what program was used.

### **Definitions**

All terms used in this information request have their ordinary meaning unless such terms are defined in the CAA, 42 U.S.C. §§ 7401 *et seq*.

- 1. The terms "relate to" or "pertain to" (or any form thereof) shall mean constituting, reflecting, representing, supporting, contradicting, referring to, stating; describing, recording, noting, embodying, containing, mentioning, studying, analyzing, discussing, evaluating or relevant to.
- 2. The term "monitoring site" shall mean a site at which one or more of the following air quality instruments are operating: a continuous PM10 monitor, a gravimetric PM10 monitor, a metal HAP collection monitor, or a VOC sampling unit.
- 3. The term "day" shall mean calendar day. If a deadline falls on a non-business day, the following business day shall be the due date.
- 4. The terms "document" and "documents" shall mean any object that records, stores, or presents information, and includes writings, memoranda, records, or information of any kind, formal or informal, whether wholly or partially handwritten or typed, whether in computer format, memory, or storage device, or in hardcopy, including any form or format of these. If in computer format or memory, each such document shall be provided in translation to a form useable and readable by EPA, with all necessary documentation and support. All documents in hard copy should also include attachments to or enclosures with any documents.

# Appendix B

# Information You Are Required to Submit to EPA

The following monitoring, results, and general information for the Sims facility located at 2500 S Paulina Street, Chicago, Illinois ("the facility") shall be installed/provided in accordance with the foregoing Request for Information pursuant to Section 114(a) of the CAA, 42 U.S.C. § 7414(a) within the specified time frames:

- 1. Within 10 days of receipt of this Request, Sims shall submit a written certification of its intent to comply with this Request.
- 2. Within 30 days of this Request, Sims shall submit a monitoring plan detailing the facility's plans to comply with this Request's Nos. 4-22 below. EPA will review the monitoring plan and provide comments. Sims shall incorporate EPA's comments and resubmit the monitoring plan. EPA will then approve the plan. Monitoring infrastructure development shall not commence until the monitoring plan has been approved.
- 3. Within 30 days of EPA approval of the monitoring plan, Sims shall submit a Quality Assurance Project Plan (QAPP) to EPA for approval. The guidance document for writing a QAPP is "EPA Guidance for Quality Assurance Project Plans," EPA QA/G-5, EPA/600/R-02/009 December 2002, and is available at <a href="https://www.epa.gov/quality/guidance-quality-assurance-project-plans-epa-qag-5">https://www.epa.gov/quality/guidance-quality-assurance-project-plans-epa-qag-5</a>. Any measurements identified by this information request should be incorporated into the QAPP.
- 4. All the required monitoring and sampling shall take place until new air pollution control equipment is installed, is continuously operational, and Illinois EPA confirms that all required testing has been successfully completed pursuant to Construction Permit Application Number 21120017 (in draft at the time of this letter).

## **PM10 Monitors and Siting**

- 5. Within 60 days of the final QAPP approval by EPA, Sims shall:
  - a. Continuously monitor real-time PM10 concentrations using either a Federal Equivalent Method (FEM)<sup>1</sup> or alternate method, such as a Near-Reference Monitor as described by the Chicago Department of Public Health Rules for Large Recycling Facilities<sup>2</sup>. Sims shall operate at least four real-time PM10 monitors (*i.e.*, FEM or alternate method) generally in the north, northeast, east, and southwest directions on the facility property;
  - b. Intermittently (1-in-3-day schedule is required) sample and analyze samples for PM10 concentrations (*i.e.*, gravimetric analysis) over a 24-hour period using either a

 $<sup>\</sup>frac{1}{https://www.epa.gov/system/files/documents/2021-12/designated-referene-and-equivalent-methods-12152021.pdf}$ 

<sup>&</sup>lt;sup>2</sup>https://www.chicago.gov/content/dam/city/depts/cdph/InspectionsandPermitting/CDPH%20Rules%20for%20Large%20Recycling%20Facilities Issued%20June%205,%202020.pdf

- Federal Reference Method (FRM)<sup>3</sup> that is collocated with an FEM at the most northern site, or collect and assess samples for PM10 concentrations using filter media (i.e., gravimetric analysis) from two alternate method monitors at the most northern and eastern sites; and
- c. Intermittently (1-in-3-day schedule is required) assess samples collected over a 24hour period in paragraph 5(b) for all metal hazardous air pollutants (HAP) in PM10 detailed in EPA's HAP List<sup>4</sup> using an FRM or another method approved by EPA through Sims' monitoring plan submission. Sims must collect metal HAP measurements at no less than three sites with siting priority given to locations nearest residential areas (i.e., northern, southwestern, and eastern sites).
- 6. Within 60 days of the final QAPP approval by EPA, Sims shall install, operate, and maintain real-time PM10 and metal HAP monitoring sites at the facility. The monitoring sites and monitoring equipment shall conform with the following requirements:
  - The real-time PM10 monitors shall meet the specifications of an FEM or alternate a. method described here<sup>5</sup> or here<sup>6</sup>, respectively;
  - The gravimetric and metal HAP filter-based sampling shall follow the 1-in-3-day b. EPA Monitoring Schedule;<sup>7</sup>
  - The intermittent PM10 filter collections must undergo gravimetric analysis c. following guidance and requirements outlined within 40 CFR Part 50, Appendix J, Quality Assurance Guidance Document 2.12, 8 and Quality Assurance Handbook for Air Pollution Measurement Systems Volume II, 9 except for requirements and/or guidance surrounding flow rates if an alternate method is used for gravimetric measurements;
  - The intermittent metal HAP filter collections must undergo laboratory analysis for d. the determination of lead and toxic metals (antimony, arsenic, beryllium, cadmium, chromium, cobalt, manganese, mercury, nickel, and selenium) following Compendium Method IO-3.5; 10
  - Sims shall follow all monitoring, siting, and quality assurance criteria in 40 CFR e. Part 58, Appendix E;

<sup>&</sup>lt;sup>3</sup> https://www.epa.gov/system/files/documents/2021-12/designated-referene-and-equivalent-methods-12152021.pdf

<sup>4</sup> https://www.epa.gov/haps/initial-list-hazardous-air-pollutants-modifications

<sup>&</sup>lt;sup>5</sup> https://www3.epa.gov/ttnamti1/files/ambient/criteria/AMTIC%20List%20Dec%202016-2.pdf;

<sup>&</sup>lt;sup>6</sup>https://www.chicago.gov/content/dam/city/depts/cdph/InspectionsandPermitting/CDPH%20Rules%20for%20Large %20Recycling%20Facilities Issued%20June%205,%202020.pdf

<sup>&</sup>lt;sup>7</sup> https://www.epa.gov/amtic/sampling-schedule-calendar

<sup>8</sup> https://www3.epa.gov/ttnamti1/files/ambient/pm25/qa/m212.pdf

<sup>9</sup> https://www.epa.gov/sites/default/files/2020-10/documents/final\_handbook\_document\_1\_17.pdf 10 https://www.epa.gov/sites/default/files/2015-07/documents/epa-io-3.5.pdf

- f. Sims shall ensure instruments meet measurement quality objectives outlined in Quality Assurance Handbook for Air Pollution Measurement Systems Volume II Appendix D;<sup>11</sup>
- g. Sims shall determine PM10 concentrations from filter-based sampling according to 40 CFR Part 50, Appendix J;
- h. Sims shall determine lead (Pb) concentrations from filter-based sampling according to 40 CFR Part 50, Appendix Q;
- i. Sims shall determine other metal HAP concentrations from filter-based sampling according to Section 4.4.11 PM10 Metals Analysis by ICP/MS EPA IO-3.5 within the National Air Toxics Trends Stations (NATTS) Program Technical Assistance Document (TAD) Revision 3, <sup>12</sup> or the most recent version;
- j. All data collected shall be consistent with units in the National Ambient Air Quality Standards for PM10 and lead (*i.e.*, local conditions) and consistent with the NATTS TAD reporting requirements for other metal HAPs (*i.e.*, ng m<sup>-3</sup> in local conditions); and
- k. Sims shall attach a data logger to the monitors and shall record readings from real-time monitors.
- 7. Sims shall follow operating and quality assurance procedures identified in the Quality Assurance Handbook for Air Pollution Measurement Systems Volume II, 40 CFR Part 58, Appendix A, and manufacturer's maintenance manuals. If an alternate monitor is used, operating procedures must mirror requirements and guidance for FEM operations, except where not possible (*i.e.*, flow rate).
- 8. Sims shall be responsible for all operation and maintenance associated with the PM10 and metal HAP monitors and samplers. Maintenance shall include, at a minimum, the replacement of any equipment and cleaning on a schedule specified in the manufacturer's maintenance manual.
- 9. Sims shall order and pay for laboratory analysis of samples, and any necessary replacement parts, accessories, maintenance, etc.
- 10. Sims shall properly change the PM10 and/or metal HAP filters in all sampling devices.
- 11. Sims shall archive all samples from the intermittent PM10 and metal HAP instruments for at least three years, if the analyses are non-destructive.

<sup>11</sup> https://www.epa.gov/sites/default/files/2020-

<sup>10/</sup>documents/app d validation template version 03 2017 for amtic rev 1.pdf

<sup>&</sup>lt;sup>12</sup>https://www3.epa.gov/ttnamti1/files/ambient/airtox/NATTS%20TAD%20Revision%203\_FINAL%20October%20 2016.pdf

# Volatile Organic Compound and Other Specified Compound Monitoring and Siting

- 12. Within 60 days of the final QAPP approval by EPA, Sims shall:
  - a. Intermittently (1-in-3-day schedule is required) sample for volatile organic compounds (VOC) and other specified compounds concentrations over a 24-hour period using Compendium Method TO-15A; <sup>13</sup> and
  - b. Operate samplers at no less than three sites, which are collocated with PM10 monitors and/or samplers, with siting priority given to locations nearest residential areas (*i.e.*, northern, southwestern, and eastern sites).
- 13. Within 60 days of the final QAPP approval by EPA, Sims shall install, operate, and maintain at least three VOC and other specified compound monitoring sites at the facility. The monitoring sites and monitoring/sampling equipment shall conform with the following requirements:
  - a. The VOC and other specified compound concentration measurements must conform with the requirements outlined in the NATTS TAD Revision 3, <sup>14</sup> or the most recent version;
  - b. The VOC and other specified compound sampling shall follow the 1-in-3-day EPA Monitoring Schedule; 15
  - c. The VOC and other specified compound samples must undergo laboratory concentration analysis for the list of VOCs and other specified compounds in Appendix C;
  - d. Sims shall follow all monitoring, siting, and quality assurance criteria in the NATTS TAD for VOC and other specified compound sampling;
  - e. All data collected shall be consistent with units in the NATTS TAD (i.e., standard conditions); and
  - f. A chain-of-custody form must accompany all VOC and other specified compound collection devices throughout its respective use.
- 14. Sims shall follow operating and quality assurance procedures consistent with the most recent version of the NATTS TAD and Compendium Method TO-15A;
- 15. Sims must use an analyzing laboratory that at least demonstrates acceptable performance through proficiency testing (TO-15A, Section 15.3.6 and NATTS TAD Section 2.1.4.1).

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<sup>13</sup> https://www.epa.gov/sites/default/files/2019-12/documents/to-15a vocs.pdf

<sup>&</sup>lt;sup>14</sup>https://www3.epa.gov/ttnamti1/files/ambient/airtox/NATTS%20TAD%20Revision%203\_FINAL%20October%20 2016.pdf

<sup>15</sup> https://www.epa.gov/amtic/sampling-schedule-calendar

- 16. Sims shall be responsible for all operation and maintenance associated with the VOC and other specified compound sampling units.
- 17. Sims shall order and pay for any necessary replacement parts, accessories, maintenance, etc.
- 18. Sims shall properly change the mass flow controllers in accordance with the NATTS TAD with consideration to recent EPA-issued memorandums. 16

# **Wind Speed and Direction Monitoring**

- 19. Sims shall install a meteorological tower at a location representative of local wind conditions. At a minimum, the meteorological tower must continuously measure and record wind speed and wind direction at one-hour intervals throughout the entire monitoring period. Sims shall correlate 1-hr and 24-hr PM10 measurements with wind speed and wind direction data to determine the source direction of PM10 measurements and the effects of wind speed on PM10 concentrations. The meteorological tower must also include calibrated temperature and pressure instrumentation for purposes of determining corrected (actual) PM10 concentrations as recorded by the monitors. Sims shall maintain and submit reports and records in accordance with paragraph 26 and Appendix A.
- 20. With respect to the meteorological monitoring site, Sims shall follow the Quality Assurance Handbook for Air Pollution Measurement Systems Volume IV: Meteorological Measurements Version 2.0.<sup>17</sup>
- 21. The internal clocks of all PM10 analyzers, data loggers, and the wind speed and wind direction data logger shall be synchronized to within 60 seconds of each other (local time and not adjusted for Daylight Savings Time) and shall be checked against a calibrated reference clock at least once every 30 days. Instrument clocks that are more or less than 60 seconds from the reference clock shall be reset to within 60 seconds of the reference clock. Each of these inconsistencies and each reset time shall be noted in the study log.
- 22. Sims shall be responsible for maintenance associated with the meteorological tower on a schedule specified in the manufacturer's maintenance manual. Sims shall order and pay for any necessary replacement parts, accessories, maintenance, etc.

## **General Requirements Applicable to All Requests**

23. Sims shall provide EPA and/or Illinois Environmental Protection Agency (IEPA) access to the monitor sites and respond to any inquiries regarding monitor siting, operations, or maintenance. In the event that an inspector or auditor identifies problems, Sims shall take appropriate corrective actions. Any changes made to monitor siting, operations, or maintenance shall be approved by EPA prior to the change.

<sup>&</sup>lt;sup>16</sup> https://www.epa.gov/sites/default/files/2021-04/documents/use\_of\_stand-alone timer timer guidance for voc sampling.pdf

alone timer timer guidance for voc sampling.pdf

17 https://www.epa.gov/sites/default/files/2021-04/documents/volume iv meteorological measurements.pdf

- 24. Sims shall keep a daily log and monthly reports of the following information and submit to EPA in accordance with paragraph 27 and Appendix A:
  - a. Each site visit and operator activities including all quality assurance and control information;
  - b. Any monitoring system downtime (date, time, duration, and reason) along with any corrective actions taken;
  - c. Any possible interferences observed by the operator such as nearby construction or demolition; and
  - d. Any calibration data provided by Sims or other parties supporting this data collection: the air quality monitoring/sampling instrument manufacturers, analyzing laboratory, and contractor.
- 25. Hourly data from each real-time PM10 monitor, meteorological monitoring data, 24-hour data from gravimetric monitors, and 24-hour data from VOC and other specified compound sampling units shall be downloaded as ASCII comma-delimited files and submitted to EPA at in accordance with paragraph 26 and Appendix A, every month. The files should have a single "header" row, with all following rows being individual records, and all columns being a single variable according to the header row.
- When monitoring commences, Sims shall maintain a record of the following items, in an Excel or compatible format, for each day material transfer and processing operations (loading, unloading, shredding, sorting) at the facility were occurring and submit to EPA in accordance with Appendix A:
  - a. Date, approximate start time and duration, type of material <u>unloaded</u>, and mode of transportation (truck, rail, barge);
  - b. Date, approximate start time and duration, type of material <u>loaded</u>, and mode of transportation (truck, rail, barge);
  - c. Date, approximate start time and duration, and type of material <u>processed through</u> the shredder; and
  - d. Date, approximate start time and duration, and type of material <u>processed through</u> the metals recycling plant.
- 27. Sims shall submit monthly reports and logs specified in Request Nos. 19, 24, 25, and 26 in accordance with Appendix A, to EPA for as long as monitoring is required. Each report is due within 30 days of the end of the month being reported.

**Appendix C: List of VOCs and Other Specified Compounds** 

Compound	CAS#
Acrolein	107-02-8
acrylonitrile	107-13-1
Benzene	71-43-2
benzyl chloride	100-44-7
bromoform (tribromomethane)	75-25-2
1,3-butadiene	106-99-0
carbon disulfide	75-15-0
carbon tetrachloride (tetrachloromethane)	56-23-5
chlorobenzene	108-90-7
chloroform (trichloromethane)	67-66-3
1,2-dibromoethane	106-93-4
1,4-dichlorobenzene	106-46-7
dichlorodifluoromethane (Freon-12)	75-71-8
1,1-dichloroethane	75-34-3
1,2-dichloroethane	107-06-2
1,1-dichloroethene	75-35-4
1,2-dichloropropane	78-87-5
1,2-dichlorotetrafluoroethane (Freon-114)	76-14-2
1,4-dioxane	123-91-1
ethyl chloride (chloroethane)	75-00-3
ethylbenzene	100-41-4
hexachloro-1,3-butadiene	87-68-3
hexane	110-54-3
methanol	67-56-1
methyl bromide (bromomethane)	74-83-9
methyl chloride (chloromethane)	74-87-3
methyl isobutyl ketone (4-methyl-2-pentanone)	108-10-1
methyl methacrylate	80-62-6
methyl tert-butyl ether	1634-04-4
methylene chloride (dichloromethane)	75-09-2
styrene	100-42-5
1,1,2,2-tetrachloroethane	79-34-5
tetrachloroethene	127-18-4
toluene	108-88-3
1,2,4-trichlorobenzene	120-82-1
1,1,1-trichloroethane	71-55-6
1,1,2-trichloroethane	79-00-5
trichlorofluoromethane (Freon 11)	75-69-4
1,1,2-trichloro-1,2,2-trifluoroethane (Freon-113)	76-13-1

trichloroethene	79-01-6
vinyl acetate	108-05-4
vinyl bromide	593-60-2
vinyl chloride (chloroethene)	75-01-4
m-xylene	108-38-3
p-xylene	106-42-3
o-xylene	95-47-6