



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

August 2, 2022

**VIA ELECTRONIC MAIL**  
**DELIVERY RECEIPT REQUESTED**

Mr. Leroy Magwood  
Chief Technology Officer  
XG Sciences Inc.  
3101 Grand Oak Drive  
Lansing, Michigan 48911  
l.magwood@xgsciences.com

Re: Consent Agreement and Final Order  
Facility Name: XG Sciences Inc.  
EPA Identification No.: MIK196214621  
Docket No: **RCRA-05-2022-0013**

Dear Mr. Magwood:

Attached, please find a signed, fully executed Consent Agreement and Final Order (CAFO) in resolution of the above case. The CAFO was filed on August 2, 2022, with the Regional Hearing Clerk (RHC).

Please submit required certification and pay the civil penalty in the amount of \$22,944 in the manner prescribed in paragraphs 42 - 46 of the CAFO, and reference all checks with the docket number RCRA-05-2022-0013. Your certification and payment are due within 30 calendar days of the effective date of the CAFO. Thank you for your cooperation in resolving this matter.

If you have any questions or concerns regarding this matter, please contact Derrick Samaranski, of my staff, at [samaranski.derrick@epa.gov](mailto:samaranski.derrick@epa.gov) or 312-886-7812.

Sincerely,

**Julie Morris**  
Digitally signed by Julie  
Morris  
Date: 2022.06.30  
10:34:05 -05'00'

Julie Morris, Manager  
LECAB Branch

Attachments

cc: Alexandra Clark, EGLE ([clarka37@michigan.gov](mailto:clarka37@michigan.gov))  
Lonnie Lee, EGLE ([leel@michigan.gov](mailto:leel@michigan.gov))  
Elizabeth Browne, EGLE ([brownee@michigan.gov](mailto:brownee@michigan.gov))  
R5LECAB@epa.gov

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5

<b>In the Matter of:</b>	)	<b>Docket No. RCRA-05-2022-0013</b>
	)	
<b>XG Sciences Inc.</b>	)	
<b>Lansing, Michigan</b>	)	<b>Consent Agreement and Final Order</b>
	)	<b>Under Section 3008(a) of the Resource</b>
<b>U.S. EPA ID No.: MIK196214621</b>	)	<b>Conservation and Recovery Act,</b>
	)	<b>42 U.S.C. § 6928(a)</b>
<b>Respondent.</b>	)	
<hr/>		

**Consent Agreement and Final Order**

**Preliminary Statement**

1. This is an administrative action commenced and concluded under Section 3008(a) of the Solid Waste Disposal Act, as amended, also known as the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6928(a), and Sections 22.13(b) and 22.18(b)(2) and (3) of the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits (Consolidated Rules) as codified at 40 C.F.R. Part 22.

2. The Complainant is the Director of the Enforcement and Compliance Assurance Division, United States Environmental Protection Agency (U.S. EPA), Region 5.

3. Respondent is XG Sciences Inc., a corporation doing business in the State of Michigan.

4. U.S. EPA provided notice of this action to the State of Michigan pursuant to Section 3008(a)(2) of RCRA, 42 U.S.C. § 6928(a)(2).

5. Where the parties agree to settle one or more causes of action before the filing of a complaint, the administrative action may be commenced and concluded simultaneously by the

issuance of a consent agreement and final order (CAFO). 40 C.F.R. § 22.13(b).

6. The parties agree that settling this action without the filing of a complaint or the adjudication of any issue of fact or law is in their interest and in the public interest.

#### **Jurisdiction and Waiver of Right to Hearing**

7. Jurisdiction for this action is conferred upon U.S. EPA by Sections 3006 and 3008 of RCRA, 42 U.S.C. §§ 6926 and 6928.

8. Respondent admits the jurisdictional allegations in this CAFO and neither admits nor denies the factual allegations in this CAFO.

9. Respondent waives its right to request a hearing as provided at 40 C.F.R. § 22.15(c), any right to contest the allegations in this CAFO, and its right to appeal this CAFO.

#### **Statutory and Regulatory Background**

10. Pursuant to Sections 3002–3005 of RCRA, 42 U.S.C. §§ 6922–6925, U.S. EPA promulgated regulations codified at 40 C.F.R. Parts 260 through 279, governing generators and transporters of hazardous waste and facilities that treat, store, and dispose of hazardous waste.

11. Pursuant to Section 3006 of RCRA, 42 U.S.C. § 6926, U.S. EPA may authorize a state to administer the RCRA hazardous waste program in lieu of the federal program when the Administrator finds that the state program meets certain conditions.

12. Any violation of regulations promulgated pursuant to Subtitle C or any state provision authorized pursuant to Section 3006 of RCRA constitutes a violation of RCRA, subject to the assessment of civil penalties and issuance of compliance orders as provided in Section 3008 of RCRA, 42 U.S.C. § 6928.

13. Pursuant to Section 3006(b) of RCRA, 42 U.S.C. § 6926(b), the Administrator of U.S. EPA granted the State of Michigan final authorization to administer a state hazardous waste

program in lieu of the federal government's base RCRA program effective October 16, 1986 (51 Fed. Reg. 36804-36805, October 16, 1986).

14. Under Section 3008(a) of RCRA, 42 U.S.C. § 6928(a), U.S. EPA may issue an order assessing a civil penalty for any past or current violation, requiring compliance immediately or within a specified period, or both.

#### **Factual Allegations**

15. Respondent was and is a "person" as defined by Michigan Admin. Code R MAC 299.9106(i), and Section 1004(15) of RCRA, 42 U.S.C. § 6903(15).

16. Respondent is an "owner" or "operator," as those terms are defined under Michigan Admin. Code R 299.9106(f) and (g), and 40 C.F.R. § 260.10, of a facility located at 3101 Grand Oak Drive, Lansing, Michigan (Facility).

17. At all times relevant to this CAFO, Respondent's Facility consisted of land and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste.

18. Respondent's Facility is a "facility," as that term is defined under Michigan Admin. Code R 299.9103(s), and 40 C.F.R. § 260.10.

19. Respondent's actions and processes at the Facility cause the production of "hazardous waste," as that term is defined under Michigan Admin. Code R 299.9104(f) and 299.9203, and 40 C.F.R. § 260.10.

20. Respondent is a "generator" of hazardous waste, as that term is defined under Michigan Admin. Code R 299.9104(a) and 40 C.F.R. § 260.10.

21. Since at least 2017, Respondent generated 1,000 kilograms or greater of hazardous waste in some calendar months (qualifying it as a "large quantity generator"), which it shipped

off-site to a treatment, storage, or disposal facility within the United States.

22. On March 3, 2022, U.S. EPA sent to Respondent a Notice of Potential RCRA Violations and Opportunity for Settlement.

23. The Notice letter identified potential RCRA violations, and an option and timeline for resolution of the matter through a streamlined settlement process.

24. The goal of the streamlined settlement process is to quickly and efficiently assess and resolve the matter, bring the Facility into compliance, and enter into an agreed upon CAFO.

25. Thereafter, Respondent engaged with U.S. EPA to expeditiously assess the matter and agree to the entry of this CAFO.

### **Alleged Violations**

#### **Count I: Notification of Change of Hazardous Waste Activity**

26. Complainant incorporates paragraphs 1 through 25 of this CAFO as though set forth in this paragraph.

27. Pursuant to Michigan Admin. Code R 299.9205(5), a generator must determine the quantity of hazardous waste generated per month, so as to allow the generator to determine the applicability of the provisions of Michigan Admin. Code R Part 3 that are dependent on quantity generated per month.

28. Pursuant to Section 3010(a) of RCRA, 42 U.S.C. § 6930(a), generators are required to file with an authorized state a notification (or, if necessary, a subsequent notification) including the types of wastes handled and the type of hazardous waste activity (*e.g.*, change to large quantity generator status).

29. Section 3010(a) of RCRA, 42 U.S.C. § 6930(a), is implemented through EPA Form 8700-12 (OMB 2050-0024), which requires notification if, among other things, a generator's

hazardous waste activity changes to large quantity generator status.

30. From at least 2017 until the present, Respondent did not submit a notification of the change of the Facility's type of hazardous waste activity to large quantity generator status in relevant months, in violation of Section 3010(a) of RCRA, 42 U.S.C. § 6930(a).

### **Count II: Biennial Reporting**

31. Complainant incorporates paragraphs 1 through 25 of this CAFO as though set forth in this paragraph.

32. Pursuant to Michigan Admin. Code R 299.9308(1), a generator of more than 1,000 kilograms of hazardous waste must provide to the director or the director's designee the data necessary for the department to prepare and submit Michigan's hazardous waste report as required. A biennial report is due by March 1 of each even-numbered year, covering the preceding calendar year.

33. In 2018, Respondent did not prepare and submit a biennial report to Michigan Department of Environment, Great Lakes, and Energy by March 1 for the preceding calendar year, in violation of Michigan Admin. Code R 299.9308(1).

34. In 2020, Respondent did not prepare and submit a biennial report to Michigan Department of Environment, Great Lakes, and Energy by March 1 for the preceding calendar year, in violation of Michigan Admin. Code R 299.9308(1).

### **Compliance Order**

35. Pursuant to Section 3008(a)(3) of RCRA, 42 U.S.C. § 6928(a)(3), Respondent is hereby ordered to comply with the following requirements as expeditiously as possible and no later than 30 days from the effective date of this CAFO.

36. Respondent shall file with Michigan Department of Environment, Great Lakes, and

Energy an updated notification of RCRA Subtitle C activities (*e.g.*, Site Identification Form 8700-12), including the types of wastes handled and the type of hazardous waste activity (*e.g.*, change to large quantity generator status). This updated notification may be filed along with the biennial hazardous waste reports.

37. Respondent shall file with Michigan Department of Environment, Great Lakes, and Energy biennial hazardous waste reports covering the years 2017 and 2019.

38. Respondent shall submit the following certification to U.S. EPA that it has complied with the requirements in paragraphs 35 through 37, above:

I certify under the penalty of law that based on my review of all relevant information and documents, and inquiring of those individuals immediately responsible for providing all relevant information and documents, XG Sciences is in compliance with the requirements of this Compliance Order. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Date \_\_\_\_\_

Signature \_\_\_\_\_

Title Interim Chief Executive Officer

39. If unable to certify compliance in paragraph 38, Respondent shall submit notification explaining why it is unable to comply, the actions it is taking to comply, and a proposed date that it will comply.

40. Respondent shall submit all certifications and notifications required under the Compliance Order to:

Derrick Samaranski (ECR-17J)  
Enforcement and Compliance Assurance Division  
U.S. EPA, Region 5  
[samaranski.derrick@epa.gov](mailto:samaranski.derrick@epa.gov)



and

Land Enforcement and Compliance Assurance Branch  
Enforcement and Compliance Assurance Division  
U.S. EPA, Region 5  
[R5LEECAB@epa.gov](mailto:R5LEECAB@epa.gov)

**Civil Penalty Order**

41. Pursuant to Section 3008(a)(3) of RCRA, 42 U.S.C. § 6928(a)(3), Complainant determined that an appropriate civil penalty to settle this action is \$22,944. In determining the penalty amount, Complainant took into account the above Factual Allegations, the seriousness of the violations, any good faith efforts to comply with the applicable requirements, and other factors as justice may require. Complainant also considered U.S. EPA's RCRA Civil Penalty Policy, dated June 23, 2003.

42. Within 30 days after the effective date of this CAFO, Respondent must pay a \$22,944 civil penalty for the RCRA violations by:

***For checks sent by regular U.S. Postal Service mail***, sending a cashier's or certified check, payable to "Treasurer, United States of America," to:

U.S. EPA  
Fines and Penalties  
Cincinnati Finance Center  
P.O. Box 979077  
St. Louis, Missouri 63197-9000

The check must state Respondent's name and the docket number of this CAFO.

***For checks sent by express mail***, sending a cashier's or certified check, payable to "Treasurer, United States of America," to:

U.S. Bank  
Government Lockbox 979077  
U.S. EPA Fines and Penalties  
1005 Convention Plaza  
Mail Station SL-MO-C2-GL  
St. Louis, Missouri 63101

The check must state Respondent's name and the docket number of this CAFO.

***For wire transfers***, sending funds electronically, payable to "Treasurer, United States of America," and to:

Federal Reserve Bank of New York  
ABA No. 021030004  
Account No. 68010727  
33 Liberty Street  
New York, New York 10045  
Field Tag 4200 of the Fedwire message should read:  
"D 68010727 Environmental Protection Agency"

In the comment or description field of the wire transfer, state Respondent's name and the docket number of this CAFO.

***For ACH electronic funds transfer***, sending funds electronically, payable to "Treasurer, United States of America," and sent to:

US Treasury REX / Cashlink ACH Receiver  
ABA: 051036706  
Account Number: 310006, Environmental Protection Agency  
CTX Format Transaction Code 22 – checking

***By paying online***, following the instructions found here:

[WWW.PAY.GOV](http://WWW.PAY.GOV)

Use the Search Public Forms option and enter 'sfo 1.1' in the search field.  
Open form and complete required fields.

43. Respondent must send a notice of payment that states Respondent's name and the case docket number to EPA at the following addresses when it pays the penalty:

Regional Hearing Clerk (E-19J)  
U.S. EPA, Region 5  
[R5hearingclerk@epa.gov](mailto:R5hearingclerk@epa.gov)

Derrick Samaranski (ECR-17J)  
Enforcement and Compliance Assurance Division  
U.S. EPA, Region 5  
[samaranski.derrick@epa.gov](mailto:samaranski.derrick@epa.gov)

Eaton Weiler (C-14J)  
Office of Regional Counsel  
U.S. EPA, Region 5  
[weiler.eaton@epa.gov](mailto:weiler.eaton@epa.gov)

Land Enforcement and Compliance Assurance Branch  
Enforcement and Compliance Assurance Division  
U.S. EPA, Region 5  
[R5LEECAB@epa.gov](mailto:R5LEECAB@epa.gov)

44. This civil penalty is not deductible for federal tax purposes.

45. If Respondent does not timely pay the civil penalty, U.S. EPA may bring an action to collect any unpaid portion of the penalty with interest, handling charges, nonpayment penalties, and the United States' enforcement expenses for the collection action. The validity, amount, and appropriateness of the civil penalty are not reviewable in a collection action.

46. Pursuant to 31 C.F.R. § 901.9, Respondent must pay the following on any amount overdue under this CAFO. Interest will accrue on any amount overdue from the date payment was due at a rate established by the Secretary of the Treasury pursuant to 31 U.S.C. § 3717(a)(1). Respondent must pay a \$15 handling charge each month that any portion of the penalty is more than 30 days past due. In addition, Respondent must pay a 6 percent per year penalty on any principal amount 90 days past due.

### **General Provisions**

47. Respondent certifies that it is complying fully with the statutory and regulatory

provisions alleged violated in this CAFO.

48. The parties consent to service of this CAFO by e-mail at the following valid e-mail addresses: Weiler.Eaton@epa.gov (for Complainant), and j.lemke@xgsciences.com (for Respondent).

49. This CAFO resolves only Respondent's liability for federal civil penalties for the violations alleged in the CAFO.

50. This CAFO does not affect the right of U.S. EPA or the United States to pursue appropriate injunctive or other equitable relief or criminal sanctions for any violations of law.

51. Payment of the civil penalty does not affect Respondent's continuing obligation to comply with RCRA and other applicable federal, state, local laws or permits.

52. This CAFO is a "final order" for purposes of 40 C.F.R. § 22.31, U.S. EPA's RCRA Civil Penalty Policy, and U.S. EPA's Hazardous Waste Civil Enforcement Response Policy (December 2003).

53. The terms of this CAFO bind Respondent, its successors, and assigns.

54. Each person signing this agreement certifies that he or she has the authority to sign for the party whom he or she represents and to bind that party to its terms.

55. Each party agrees to bear its own costs and attorney's fees in this action.

56. This CAFO constitutes the entire agreement between the parties.

**XG Sciences, Respondent**

06/27/2022

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Date

*Jacqueline M. Lemke*

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Jacqueline M. Lemke  
Interim Chief Executive Officer  
XG Sciences

**United States Environmental Protection Agency, Complainant**

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Date

**MICHAEL  
HARRIS**

Digitally signed by MICHAEL  
HARRIS  
Date: 2022.07.13 11:37:42  
-05'00'

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Michael D. Harris  
Division Director  
Enforcement and Compliance Assurance  
Division

**In the Matter of:**  
**XG Sciences**  
**Docket No. RCRA-05-2022-0013**

**Final Order**

This Consent Agreement and Final Order, as agreed to by the parties, shall become effective immediately upon filing with the Regional Hearing Clerk. This Final Order concludes this proceeding pursuant to 40 C.F.R. §§ 22.18 and 22.31. IT IS SO ORDERED.

**ANN COYLE** Digitally signed by ANN  
COYLE  
Date: 2022.08.01 12:40:14  
-05'00'

\_\_\_\_\_  
Date

\_\_\_\_\_  
Ann L. Coyle  
Regional Judicial Officer  
United States Environmental Protection Agency  
Region 5

In the matter of: XG Sciences Inc.

Docket Number: RCRA-05-2022-0013

**CERTIFICATE OF SERVICE**

I certify that I served a true and correct copy of the foregoing **Consent Agreement and Final Order**, which was filed on August 2, 2022, this day in the following manner to the addressees:

Copy by email to Respondent's Representative:  
(Delivery Receipt Requested)

Ms. Lemke  
Interim Chief Executive Officer  
[J.Lemke@xgsciences.com](mailto:J.Lemke@xgsciences.com)

Copy by email to Attorney for Complainant:

Eaton Weiler  
[Weiler.Eaton@epa.gov](mailto:Weiler.Eaton@epa.gov)

Copy by email to Regional Judicial Officer:

Ann Coyle  
[coyle.ann@epa.gov](mailto:coyle.ann@epa.gov)

**JULIANE  
GRANGE**

Digitally signed by  
JULIANE GRANGE  
Date: 2022.08.02  
12:39:19 -05'00'

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Juliane Grange  
Regional Hearing Clerk  
U.S. Environmental Protection Agency  
Region 5