UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

In the Matter of:	)	**Docket No. TSCA-05-2025-0013**
	)	
Lake Forest College	)	**Proceeding to Assess a Civil**
Lake Forest, Illinois,	)	**Penalty Under Section 16(a) of the**
	)	**Toxic Substances Control Act,**
Respondent.	)	**15 U.S.C. § 2615(a)**
	)	

Consent Agreement and Final Order

I. Preliminary Statement

1. This is an administrative action commenced and concluded under Section 16(a) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2615(a), and 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 (EPA), Region 5.

3. Respondent is Lake Forest College, a corporation with a place of business located at 555 North Sheridan Road Lake Forest, Illinois 60045.

4. 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).

5. 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.

6. Respondent consents to the assessment of the civil penalty specified in this CAFO, and to the terms of this CAFO.

II. Jurisdiction and Waiver of Right to Hearing

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

8. 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. Respondent waives any rights or defenses that Respondent has or may have for this matter to be resolved in federal court, including but not limited to any right to a jury trial, and waives any right to challenge the lawfulness of the final order accompanying the consent agreement.

III. Statutory and Regulatory Background

9. Section 1018 of the Residential Lead-Based Paint Hazard Reduction Act of 1992 (the Lead Act), 42 U.S.C. § 4852d, requires the Administrator of EPA to promulgate regulations for the disclosure of lead-based paint hazards in target housing that is offered for sale or lease.

10. On March 6, 1996, EPA promulgated regulations at 40 C.F.R. Part 745, Subpart F, Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards Upon Sale or Lease of Residential Property (Disclosure Rule) pursuant to 42 U.S.C. § 4852d.

11. 40 C.F.R. § 745.101 provides that the Disclosure Rule applies to all transactions to sell or lease target housing.

12. 40 C.F.R. § 745.103 defines target housing as any housing constructed prior to 1978, except housing for the elderly or persons with disabilities (unless any child who is less than 6 years of age resides or is expected to reside in such housing) or any 0-bedroom dwelling.

13. 40 C.F.R. § 745.103 defines "lessor" as any entity that offers target housing for lease, rent, or sublease, including but not limited to individuals, partnerships, corporations, trusts, government agencies, housing agencies, Indian tribes and nonprofit organizations.

14. 40 C.F.R. § 745.103 defines "lessee" as any entity that enters into an agreement to lease, rent or sublease target housing, including but not limited to individuals, partnerships, corporations, trusts, government agencies, housing agencies, Indian tribes and nonprofit organizations.

15. 40 C.F.R. § 745.103 defines "agent" as any party who enters into a contract with a seller or a lessor, including any party who enters into a contract with a representative of the seller or lessor, for the purpose of selling or leasing target housing.

16. 40 C.F.R. § 745.113(b) provides that each contract to lease target housing shall include, as an attachment or within the contract: (1) a specified lead warning statement; (2) a statement by the lessor disclosing the presence of any known lead-based paint and/or lead-based paint hazards or the lack of knowledge of such presence; (3) a list of any records or reports available to the lessor regarding lead-based paints and/or lead-based paint hazards in the target housing or a statement that no such records exist; (4) a statement by the lessee affirming receipt of the information set out in 40 C.F.R. § 745.113(b)(2) and (3) and the Lead Hazard Information Pamphlet; and (5) the signatures and dates of signature of the lessor, agent, and lessee certifying the accuracy of their statements.

17. According to 42 U.S.C. § 4852d(b)(5) and 40 C.F.R. § 745.118(e), the failure to comply with the Disclosure Rule is a violation of Section 409 of TSCA, 15 U.S.C. § 2689, and may subject the violator to administrative civil penalties under Section 16(a) of TSCA, 15 U.S.C. § 2615(a), 42 U.S.C. § 4852d(b)(5), and 40 C.F.R. § 745.118(f).

18. According to 42 U.S.C. § 4852d(b)(5), 15 U.S.C. § 2615(a), and 40 C.F.R. Part 19, the Administrator of EPA may assess a civil administrative penalty of up to $48,512 for each violation of 42 U.S.C. § 4852d and Section 409 of TSCA, 15 U.S.C. § 2689, that occurred after

November 2, 2015.

IV. FACTUAL BACKGROUND

19. At all times relevant to the violations alleged herein, Respondent owned residential single family and duplex dwellings in Lake Forest, Illinois at the addresses listed below (the "Respondent's properties"):

Line No.	Street Address	City/Township	State	Zip	Property Type	Year Constructed
1	7 Campus Circle	Lake Forest	IL	60045	Single-Family	1916
2	8 Campus Circle	Lake Forest	IL	60045	Single-Family	1916
3	9 Campus Circle	Lake Forest	IL	60045	Single-Family	1927
4	10 Campus Circle	Lake Forest	IL	60045	Single-Family	1927
5	11 Campus Circle	Lake Forest	IL	60045	Single-Family	1927
6	12 Campus Circle	Lake Forest	IL	60045	Single-Family	1927
7	14 Campus Circle	Lake Forest	IL	60045	Duplex	1938
8	15 Campus Circle	Lake Forest	IL	60045	Duplex	1938
9	16 Campus Circle	Lake Forest	IL	60045	Duplex	1938
10	17 Campus Circle	Lake Forest	IL	60045	Duplex	1938
11	18 Campus Circle	Lake Forest	IL	60045	Single-Family	1916
12	19 Campus Circle	Lake Forest	IL	60045	Single-Family	1916
13	21 South Campus	Lake Forest	IL	60045	Duplex	1962
14	22 South Campus	Lake Forest	IL	60045	Duplex	1962
15	24 South Campus	Lake Forest	IL	60045	Duplex	1962
16	25 South Campus	Lake Forest	IL	60045	Duplex	1962
17	28 South Campus	Lake Forest	IL	60045	Duplex	1962
18	29 South Campus	Lake Forest	IL	60045	Duplex	1962
19	329 Washington Rd.	Lake Forest	IL	60045	Duplex	1962
20	331 Washington Rd.	Lake Forest	IL	60045	Duplex	1962
21	339 Washington Rd.	Lake Forest	IL	60045	Duplex	1962
22	341 Washington Rd.	Lake Forest	IL	60045	Duplex	1962
23	341 Sheridan Rd.	Lake Forest	IL	60045	Single-Family	1960
24	647 Illinois Rd.	Lake Forest	IL	60045	Single-Family	1920
25	676 Cherry Ave.	Lake Forest	IL	60045	Duplex	1977
26	678 Cherry Ave.	Lake Forest	IL	60045	Duplex	1977
27	680 Cherry Ave.	Lake Forest	IL	60045	Duplex	1977
28	682 Cherry Ave.	Lake Forest	IL	60045	Duplex	1977
29	712 Woodlawn	Lake Forest	IL	60045	Duplex	1967
30	714 Woodlawn	Lake Forest	IL	60045	Duplex	1967

20. During calendar years 2018 through 2021, Respondent entered into the following lease agreements:

Line No.	Address	Initial Date of Lease	Complete Lease Period
1	10 Campus Circle Lake Forest, IL 60045	7/25/2018	2018 to 2022
2	11 Campus Circle Lake Forest, IL 60045	6/1/2018	2018 to 2022
3	12 Campus Circle Lake Forest, IL 60045	7/1/2021	2021 to 2022
4	12 Campus Circle Lake Forest, IL 60045	5/24/2019	2019 to 2020
5	14 Campus Circle Lake Forest, IL 60045	6/1/2018	2018 to 2019
6	14 Campus Circle Lake Forest, IL 60045	6/23/2019	2019 to 2022
7	15 Campus Circle Lake Forest, IL 60045	6/1/2018	2018 to 2019
8	16 Campus Circle Lake Forest, IL 60045	8/1/2019	2019 to 2022
9	17 Campus Circle Lake Forest, IL 60045	6/1/2018	2018 to 2022
10	18 Campus Circle Lake Forest, IL 60045	6/1/2018	2018 to 2022
11	19 Campus Circle Lake Forest, IL 60045	6/1/2021	2021 to 2022
12	19 Campus Circle Lake Forest, IL 60045	6/1/2018	2018 to 2020
13	21 South Campus Lake Forest, IL 60045	7/1/2021	2021 to 2022
14	21 South Campus Lake Forest, IL 60045	8/1/2020	2020 to 2021
15	21 South Campus Lake Forest, IL 60045	6/1/2018	2018 to 2019
16	22 South Campus Lake Forest, IL 60045	9/1/2019	2019 to 2021
17	22 South Campus Lake Forest, IL 60045	6/1/2018	2018 to 2019
18	24 South Campus Lake Forest, IL 60045	6/1/2019	2019 to 2021
19	24 South Campus Lake Forest, IL 60045	6/1/2018	2018 to 2019
20	241 Washington Rd. Lake Forest, IL 60045	12/7/2019	2019 to 2020
21	25 South Campus Lake Forest, IL 60045	6/1/2018	2018 to 2019
22	25 South Campus Lake Forest, IL 60045	4/7/2019	2019 to 2022
23	28 South Campus Lake Forest, IL 60045	9/14/2021	2021 to 2022
24	28 South Campus Lake Forest, IL 60045	6/1/2018	2018 to 2021
25	29 South Campus Lake Forest, IL 60045	6/1/2018	2018 to 2021
26	329 Washington Rd. Lake Forest, IL 60045	8/1/2018	2018 to 2020
27	329 Washington Rd. Lake Forest, IL 60045	7/15/2021	2021 to 2022
28	331 Washington Rd. Lake Forest, IL 60045	8/1/2018	2018 to 2022
29	339 Washington Rd. Lake Forest, IL 60045	8/1/2018	2018 to 2020
30	341 Sheridan Rd. Lake Forest, IL 60045	6/1/2019	2019 to 2022
31	341 Washington Rd. Lake Forest, IL 60045	6/1/2018	2018 to 2020
32	647 Illinois Rd. Lake Forest, IL 60045	7/5/2018	2018 to 2022
33	676 Cherry Ave. Lake Forest, IL 60045	8/1/2019	2019 to 2022
34	676 Cherry Ave. Lake Forest, IL 60045	6/1/2018	2018 to 2019
35	678 Cherry Ave. Lake Forest, IL 60045	7/20/2020	2020 to 2022
36	678 Cherry Ave. Lake Forest, IL 60045	6/1/2018	2018 to 2019
37	678 Cherry Ave. Lake Forest, IL 60045	6/1/2019	2019 to 2020
38	680 Cherry Ave. Lake Forest, IL 60045	6/1/2021	2021 to 2022

39	680 Cherry Ave. Lake Forest, IL 60045	6/18/2018	2018 to 2021
40	682 Cherry Ave. Lake Forest, IL 60045	7/29/2019	2019 to 2022
41	682 Cherry Ave. Lake Forest, IL 60045	6/1/2018	2018 to 2019
42	7 Campus Circle Lake Forest, IL 60045	6/1/2018	2018 to 2020
43	7 Campus Circle Lake Forest, IL 60045	8/12/2021	2021 to 2022
44	712 Woodlawn Lake Forest, IL 60045	6/1/2018	2018 to 2022
45	714 Woodlawn Lake Forest, IL 60045	6/1/2019	2019 to 2022
46	8 Campus Circle Lake Forest, IL 60045	7/17/2019	2019 to 2021
47	8 Campus Circle Lake Forest, IL 60045	6/1/2018	2018 to 2019
48	9 Campus Circle Lake Forest, IL 60045	8/4/2019	2019 to 2021
49	9 Campus Circle Lake Forest, IL 60045	6/1/2018	2018 to 2019

21. Each of the leases referenced in Paragraph 20, above, covered a term of occupancy greater than 100 days.

22. Respondent is a "lessor," as defined in 40 C.F.R. § 745.103, for each of Respondent's properties identified in Paragraph 19 above.

23. Each of Respondent's properties identified in Paragraph 19, above, was "target housing," as that term is defined in 40 C.F.R. § 745.103.

24. Each individual who entered into the lease agreements identified in Paragraph 20, above, is or was a "lessee," as defined in 40 C.F.R. § 745.103.

V. Violations

Violations 1 – 49: Failure to include a lead warning statement

25. Complainant realleges and incorporates by reference the allegations in Paragraphs 19 through 24, above, as though set forth fully herein.

26. 40 C.F.R. § 745.113(b) provides that each contract to lease target housing shall include, as an attachment or within the contract, *inter alia*, a specified lead warning statement. 40 C.F.R. § 745.113(b)(1).

27. Each of the lease agreements identified in Paragraph 20, above, was a contract to lease target housing.

28. Respondent failed to include the required lead warning statement, either in or attached to, each of the forty-nine lease agreements identified in Paragraph 20, above.

29. Respondent's failure to include the specified lead warning statement in each of the lease agreements identified in Paragraph 20, above, constituted 49 separate violations of 40 C.F.R. § 745.113(b)(1), 15 U.S.C. § 2689, and 42 U.S.C. § 4852d(b)(5).

Violations 50 – 98: Failure to include a statement disclosing either the presence of any known lead-based paint and/or lead-based paint hazards

30. Complainant realleges and incorporates by reference the allegations in Paragraphs 19 through 24, above, as though set forth fully herein.

31. 40 C.F.R. § 745.113(b) provides that each contract to lease target housing shall include, as an attachment or within the contract, *inter alia*, a statement by the lessor disclosing the presence of known lead-based paint and/or lead-based paint hazards in the target housing being leased or indicating no knowledge of the presence of lead-based paint and/or lead-based paint hazards. 40 C.F.R. § 745.113(b)(2).

32. Each lease agreement identified in Paragraph 20, above, was a contract to lease target housing.

33. Respondent failed to include the required statement disclosing either the presence of any known lead-based paint and/or lead-based paint hazards in the target housing or a lack of knowledge of such presence, either in or attached to, each of the 49 lease agreements identified in Paragraph 20, above.

34. Respondent's failure to include the specified disclosure or statement in each of the lease agreements identified in Paragraph 20, above, constituted 49 separate violations of 40 C.F.R. § 745.113(b)(2), 15 U.S.C. § 2689, and 42 U.S.C. § 4852d(b)(5).

Violations 99 – 147: Failure to include appropriate lists of records/reports available to the lessor in the contract

35. Complainant realleges and incorporates by reference the allegations in Paragraphs 19 through 24, above, as though set forth fully herein.

36. 40 C.F.R. § 745.113(b) provides that each contract to lease target housing shall include, as an attachment or within the contract, *inter alia*, a list of any records or reports available to the lessor regarding lead-based paint and/or lead-based paint hazards in the target housing that have been provided to the lessee or a statement that no such records are available. 40 C.F.R. § 745.113(b)(3).

37. Each of the lease agreements identified in Paragraph 20, above, was a contract to lease target housing.

38. Respondent failed to include a list of any records or reports available to the lessor regarding lead-based paint and/or lead-based paint hazards in the target housing that have been provided to the lessee or a statement that no such records are available, either in or attached to, each of the 49 lease agreements identified in Paragraph 20, above.

39. Respondent's failure to include the specified list or statement in each of the lease agreements identified in Paragraph 20, above, constituted 49 separate violations of 40 C.F.R. § 745.113(b)(3), 15 U.S.C. § 2689, and 42 U.S.C. § 4852d(b)(5).

Violations 148 – 196: Failure to include affirmation statement by the lessee

40. Complainant realleges and incorporates by reference the allegations in Paragraphs 19 through 24, above, as though set forth fully herein.

41. 40 C.F.R. § 745.113(b) provides that each contract to lease target housing shall include, as an attachment or within the contract, *inter alia*, a statement by the lessee affirming receipt of the information set out in 40 C.F.R. § 745.113(b)(2) and (3) and the Lead Hazard

Information Pamphlet required under 15 U.S.C. § 2696. 40 C.F.R. § 745.113(b)(4).

42. Each of the lease agreements identified in Paragraph 20, above, was a contract to lease target housing.

43. Respondent failed to include a statement by the lessee affirming receipt of the information set out in 40 C.F.R. § 745.113(b)(2) and (3) and the Lead Hazard Information Pamphlet required under 15 U.S.C. § 2696, either in or attached to, each of the 49 lease agreements identified in Paragraph 20, above.

44. Respondent's failure to include the specified statement in each of the lease agreements identified in Paragraph 20, above, constituted 49 separate violations of 40 C.F.R. § 745.113(b)(4), 15 U.S.C. § 2689, and 42 U.S.C. § 4852d(b)(5).

Violations 197 – 245: Failure to certify as to the accuracy of provided information

45. Complainant realleges and incorporates by reference the allegations in Paragraphs 19 through 24, above, as though set forth fully herein.

46. 40 C.F.R. § 745.113(b) provides that each contract to lease target housing shall include, as an attachment or within the contract, *inter alia* the signatures of the lessor, agent, and the lessees certifying to the accuracy of their statements and the dates of such signatures. 40 C.F.R. § 745.113(b)(6).

47. Each of the lease agreements identified in Paragraph 20, above, was a contract to lease target housing.

48. Respondent failed to include the signatures of the lessor, agent, and the lessees certifying to the accuracy of their statements and the dates of such signatures, either in or attached to, each of the 49 lease agreements identified in Paragraph 20, above.

49. Respondent's failure to include the specified certifications in each of the lease

agreements identified in Paragraph 20, above, constituted 49 separate violations of 40 C.F.R. § 745.113(b)(6), 15 U.S.C. § 2689, and 42 U.S.C. § 4852d(b)(5)

VI. CONSENT AGREEMENT

A. Civil Penalty

50. Pursuant to Section 16(a) of TSCA, 15 U.S.C. § 2615(a), Complainant determined that an appropriate civil penalty to settle this action is $621,011 ("Assessed Penalty"). In determining the penalty amount, Complainant considered the nature, circumstances, extent and gravity of the violations, and, with respect to Respondent, ability to pay, effect on ability to continue to do business, any history of such prior violations, and the degree of culpability. Complainant also considered EPA's Section 1018 – Disclosure Rule Enforcement Response and Penalty Policy, dated December 2007.

51. Pursuant to Section 16(a)(2)(C) of TSCA, 15 U.S.C. § 2615(a)(2)(C), and 40 C.F.R. § 22.31, the parties agree that payment of the entire Assessed Penalty described in Paragraph 50, above, shall be held in abeyance until the successful completion of the conditions set forth in Section V.B. and Attachments 1 through 7 of this CAFO.

52. Pursuant to Section 16(a)(2)(C) of TSCA, 15 U.S.C. § 2615(a)(2)(C), and 40 C.F.R. § 22.31, the parties agree that $292,350 of the Assessed Penalty described in Paragraph 50, above, shall be remitted upon the successful completion of Condition 1, set forth in Section V.B. and Attachments 1 through 4 of this CAFO.

53. Pursuant to Section 16(a)(2)(C) of TSCA, 15 U.S.C. § 2615(a)(2)(C), and 40 C.F.R. § 22.31, the parties agree that $273,661 of the Assessed Penalty described in Paragraph 50, above, shall be remitted upon the successful completion of Condition 2, set forth in Section V.B. and Attachments 5 through 7 of this CAFO.

54. Respondent agrees that, in compromise of the civil penalty claims alleged in this CAFO and upon the Conditions set forth in Section V.B. and Attachments 1 through 7 of this CAFO, Respondent shall pay a civil penalty in the amount of $55,000 ("Collected Penalty"), as set forth below, and shall perform the Settlement Conditions as set forth in this CAFO.

55. Within 30 days after the date the Final Order ratifying this Agreement is filed with the Regional Hearing Clerk ("Filing Date"), Respondent must pay the Collected Penalty for the TSCA violations.

56. Respondent shall pay the Collected Penalty, Assessed Penalty, any other payments due and any interest, fees, and other charges due using any method, or combination of appropriate methods, as provided on the EPA website: https://www.epa.gov/financial/makepayment. For additional instructions see: https://www.epa.gov/financial/additional-instructions-making-payments-epa.

57. When making a payment, Respondent shall:

a. Identify every payment with Respondent's name and the docket number of this Agreement, TSCA-05-2025-0013,

58. Concurrently with any payment or within 24 hours of any payment, Respondent shall serve proof of such payment to the following person(s):

Regional Hearing Clerk
U.S. Environmental Protection Agency, Region 5
r5hearingclerk@epa.gov

Michael Todd
Pesticides and Toxics Compliance Section
U.S. Environmental Protection Agency, Region 5
Todd.michael@epa.gov
and
R5LECAB@epa.gov

Andrew Futerman
Office of Regional Counsel
U.S. Environmental Protection Agency, Region 5
Futerman.Andrew@epa.gov

U.S. Environmental Protection Agency Cincinnati Finance Center
CINWD_AcctsReceivable@epa.gov

"Proof of payment" means, as applicable, a copy of the check, confirmation of credit card or debit card payment, or confirmation of wire or automated clearinghouse transfer, and any other information required to demonstrate that payment has been made according to EPA requirements, in the amount due, and identified with the appropriate docket number and Respondent's name.

59. Interest, Charges, and Penalties on Late Payments. Pursuant to 15 U.S.C. § 2615, 31 U.S.C. § 3717, 31 C.F.R. § 901.9, and 40 C.F.R. § 13.11, if Respondent fails to timely pay any portion of the Assessed or Collected Penalty per this Agreement, the entire unpaid balance of the Assessed and/or Collected Penalty and all accrued interest shall become immediately due and owing, and EPA is authorized to recover the following amounts.

a. Interest. Interest begins to accrue from the Filing Date. If the Assessed Penalty is paid in full within thirty (30) days, interest accrued is waived. If the Assessed Penalty is not paid in full within thirty (30) days, interest will continue to accrue until any unpaid portion of the Assessed Penalty as well as any interest, penalties, and other charges are paid in full. To protect the interests of the United States the rate of interest is set at the IRS **standard** underpayment rate, any lower rate would fail to provide Respondent adequate incentive for timely payment.

b. Handling Charges. Respondent will be assessed monthly a charge to cover

EPA's costs of processing and handling overdue debts. If Respondent fails to pay the Assessed Penalty in accordance with this Agreement, EPA will assess a charge to cover the costs of handling any unpaid amounts for the first thirty (30) day period after the Filing Date. Additional handling charges will be assessed each subsequent thirty (30) days, or any portion thereof, until the unpaid portion of the Assessed Penalty, as well as any accrued interest, penalties, and other charges are paid in full.

c. Late Payment Penalty. A late payment penalty of six percent (6%) per annum, will be assessed monthly on all debts, including any unpaid portion of the Assessed Penalty, interest, and other charges, that remain delinquent more than ninety (90) days.

60. Late Penalty Actions. In addition to the amounts described in the prior Paragraph, if Respondent fails to timely pay any portion of the Assessed and/or Collected Penalty, interest, or other charges and penalties per this Agreement, EPA may take additional actions. Such actions may include, but are not limited to, the following.

a. Refer the debt to a credit reporting agency or a collection agency, per 40 C.F.R. §§ 13.13 and 13.14.

b. Collect the debt by administrative offset (i.e., the withholding of money payable by the United States government to, or held by the United States government for, a person to satisfy the debt the person owes the United States government), which includes, but is not limited to, referral to the Internal Revenue Service for offset against income tax refunds, 40 C.F.R. Part 13, Subparts C and H.

c. Suspend or revoke Respondent's licenses or other privileges, or suspend or

d. disqualify Respondent from doing business with EPA or engaging in programs EPA sponsors or funds, 40 C.F.R. § 13.17.

e. Per 15 U.S.C. § 2615(a), the Attorney General will bring a civil action in the appropriate district court to recover the full remaining balance of the debt plus interest. In such an action, the validity, amount, and appropriateness of the Assessed Penalty shall not be subject to review.

61. Pursuant to 26 U.S.C. § 6050X and 26 C.F.R. § 1.6050X-1, EPA is required to send to the Internal Revenue Service ("IRS") annually, a completed IRS Form 1098-F ("Fines, Penalties, and Other Amounts") with respect to any court order or settlement agreement (including administrative settlements), that require a payor to pay an aggregate amount that EPA reasonably believes will be equal to, or in excess of, $50,000 for the payor's violation of any law or the investigation or inquiry into the payor's potential violation of any law, including amounts paid for "restitution or remediation of property" or to come "into compliance with a law." EPA is further required to furnish a written statement, which provides the same information provided to the IRS, to each payor (i.e., a copy of IRS Form 1098-F). Failure to comply with providing IRS Form W-9 or Tax Identification Number ("TIN"), as described below, may subject Respondent to a penalty, per 26 U.S.C. § 6723, 26 U.S.C. § 6724(d)(3), and 26 C.F.R. § 301.6723-1. In order to provide EPA with sufficient information to enable it to fulfill these obligations, EPA herein requires, and Respondent herein agrees, that:

a. Respondent shall complete an IRS Form W-9 ("Request for Taxpayer Identification Number and Certification"), which is available at https://www.irs.gov/pub/irs-pdf/fw9.pdf;

b. Respondent shall therein certify that its completed IRS Form W-9 includes Respondent's correct TIN or that Respondent has applied and is waiting for issuance of a TIN;

c. Respondent shall email its completed Form W-9 to Milton Wise at EPA's Cincinnati Finance Center at wise.milton@epa.gov, within 30 days after the effective date of this CAFO, and EPA recommends encrypting IRS Form W-9 email correspondence; and

d. In the event that Respondent has certified in its completed IRS Form W-9 that it does not yet have a TIN but has applied for a TIN, Respondent shall provide EPA's Cincinnati Finance Center with Respondent's TIN, via email, within five (5) days of Respondent's receipt of a TIN issued by the IRS.

B. Compliance Obligations

62. As a condition of settlement and in compromise of the civil penalty that EPA could otherwise impose herein, as described in Paragraph 50, above, Respondent agrees to perform both Settlement Conditions as set forth in this CAFO.

63. Condition 1: Abatement of subject properties: Respondent shall perform an abatement project on each of Respondent's properties identified in Paragraph 19, above, as described in Attachments 1 through 4, each of which is incorporated by reference as though fully set forth herein (hereinafter "Condition 1").

64. Respondent shall perform Condition 1 in compliance with the work plan in Attachment 1, meeting the standards in Attachment 3, and according to Compliance Schedule in Attachment 2.

65. Respondent shall ensure that the contractor it hires to perform Condition 1 is a certified lead abatement firm using certified individuals, pursuant to 40 C.F.R. § 745.266, 77 Illinois Administrative Code Section 845.125, and Illinois Administrative Code Section 845.130.

66. Upon the conclusion of work associated with Condition 1, Respondent shall ensure that its contractor performs abatement clearance testing, in accordance with 40 C.F.R. § 745.227(e)(8) and 77 Illinois Administrative Code Section 845.295, on each of the properties associated with Condition 1.

67. If the abatement clearance testing described in Paragraph 66, above, does not pass required clearance limits, Respondent shall ensure that additional cleaning is performed until such property is able to pass clearance testing limits in accordance with 40 C.F.R. § 745.227(e)(8)(viii).

68. Condition 2: Upgrades to Two Dormitories: Respondent shall perform upgrades to two of the following three dormitories: Roberts Dormitory, McClure Dormitory, or Gregory Dormitory. Respondent's upgrades to the two dormitories shall comply fully with Attachments 5 through 7, each of which is incorporated by reference as though fully set forth herein (hereinafter "Condition 2").

69. Respondent shall perform Condition 2 in compliance with the Work Plan in Attachment 5, meeting the standards of Attachment 7, and according to the Compliance Schedule in Attachment 6.

70. Respondent shall ensure that the contractor it hires to perform Condition 2 is either RRP Firm or Lead Abatement Certified, pursuant to 40 C.F.R. §§ 745.81(a)(2) or 745.266, and complies with the lead safe work practices of 40 C.F.R. Part 745, Subpart L.

71. Upon the conclusion of work associated with Condition 2, Respondent shall ensure that its contractor performs abatement clearance testing, in accordance with 40 C.F.R. § 745.227(e)(8) and 77 Illinois Administrative Code Section 845.295, on each of the dormitories associated with Condition 2.

72. If the abatement clearance testing described in Paragraph 71, above, does not pass required clearance limits, Respondent shall ensure that additional cleaning is performed by an RRP Certified Firm until such dormitory is able to pass clearance testing limits in accordance with 40 C.F.R. § 40 CFR 745.227(e)(8)(viii).

73. Quarterly Reporting, Final Reporting, and Notification Requirements: Respondent shall submit reports quarterly (i.e., every 90 days) (hereinafter "Quarterly Reports"), with the first Quarterly Report due 90 days after the effective date of this CAFO, until such time as both Conditions 1 and 2 are entirely complete, in accordance with the Final Reporting requirements described below.

74. Each Quarterly Report shall describe steps Respondent, its employees, contractors, or assigns, has done in the previous 90 days towards the completion of Conditions 1 and 2. Respondent shall identify any major milestones accomplished in the previous 90 days, and what actions it anticipates undertaking in the upcoming 90 days.

75. Respondent shall submit a Final Report within 90 days of its completion of each of Conditions 1 and 2. The Final Report shall describe the actions that Respondent, its employees, contractors, or assigns, have completed, together with copies of all final clearance testing or other necessary testing results.

76. Respondent shall notify EPA when it anticipates beginning any work pursuant to Condition 1 or 2 and its anticipated schedule for work, no later than 30 days prior to work

beginning. Respondent shall also notify EPA, within 15 days, of any problems it encounters that are likely to delay Respondent's completion of Conditions 1 or 2 to such an extent that Respondent may not be able to comply with the schedules established in Attachments 2 and 6 to this CAFO.

77. Respondent shall submit each Quarterly Report, Final Report, and Notification to EPA by emailing a copy of such to todd.michael@epa.gov and Futerman.andrew@epa.gov, or any such other person(s) as EPA may later identify in writing to Respondent.

C. Non-Remittance, Dispute Resolution, and Tolling

78. If EPA, in its sole discretion, determines that Respondent has failed to implement its compliance obligations under this CAFO fully, timely, and satisfactorily, EPA may issue a non-remittance order requiring Respondent to pay the amount of the Assessed Penalty referred to in Paragraph 50, above, or a lesser amount, plus interest, fees, handling charges, late payment penalty, and any other appropriate charges as described in Paragraphs 59 to 60, above, accrued from the Effective Date of this CAFO. EPA may, but is not required to, deduct any reasonably documented expenditures or project completions in determining the remaining penalty amount owed. Respondent waives its right to a hearing under Section 16(a)(2) of TSCA, 15 U.S.C. § 2615(a)(2), or any other law. Respondent further agrees to be bound by EPA's determination under this Paragraph.

79. Respondent acknowledges that it is responsible for the successful completion of both Condition 1 and Condition 2—described in Paragraphs 62 through 77, above, and Attachments 1 through 7 of this CAFO—and that the parties would not have agreed to the terms of this CAFO without the inclusion of both Conditions. Therefore, if Respondent fails to successfully and timely complete either of the two conditions described above, Respondent

acknowledges that it may be responsible for payment of the entire Assessed Penalty, as described in Paragraph 50, above, plus interest, fees, handling charges, late payment penalty, and any other appropriate charges as described in Paragraphs 59 to 60, above, accrued from the Effective Date of this CAFO.

80. Prior to making a determination that Respondent has failed to perform the compliance obligations contained herein and issuing a non-remittance order, EPA will give Respondent written notice of deficiencies and provide Respondent with an opportunity to cure deficiencies. The parties agree that if Respondent is unable to perform its Compliance Obligations, despite having taken commercially reasonable precautions, because of acts of God, war, civil commotion, fire, flood, labor, of material shortages beyond Respondent's reasonable control, such circumstances shall be taken into consideration when ensuring compliance with the Work Plans and Compliance Schedules.

81. The parties agree to use their best efforts informally and in good faith to resolve disputes and differences of opinion that may arise concerning provisions of this CAFO. Notwithstanding the above, if Respondent disagrees, in whole or part, with any decision made by EPA pursuant to this CAFO with respect to the following: (1) satisfaction of conditions described in Section V.B., above; or (2) an EPA determination to issue a non-remittance order, Respondent shall notify EPA in writing of such objections and the basis or bases therefore within 20 calendar days of receipt of EPA's disapproval, modification, decision, or directive. The notice shall set forth the specific points of dispute, the position Respondent maintains, the basis or bases for Respondent's position, and any matters Respondent considers necessary for EPA's determination. Following EPA's receipt of such written notice, EPA will provide Respondent with its final determination in writing on a pending dispute, which decision shall be binding. The

parties may continue to confer and to use informal efforts to resolve the dispute during the period that EPA's final determination is pending.

82. Respondent agrees that the time period from the Effective Date of this CAFO until all of the compliance obligations of Section V.B. and attachments thereto are completed (the "Tolling Period") shall not be included in computing the running of any statute of limitations potentially applicable to any action brought by Complainant on any claims (the "Tolled Claims") set forth in this CAFO. Respondent shall not assert, plead, or raise in any fashion, whether by answer, motion or otherwise, any defenses of laches, estoppel, or waiver, or other similar equitable defenses based on the running of any statute of limitations or the passage of time during the Tolling Period in any action brought on the Tolled Claims.

VII. General Provisions

83. The parties consent to service of this CAFO by e-mail at the following valid e-mail addresses: futerman.andrew@epa.gov (for Complainant), and jonmicah.goeller@huschblackwell.com (for Respondent). Respondent understands that the CAFO will become publicly available upon filing.

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

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

86. This CAFO does not affect Respondent's responsibility to comply with the Lead Act and the Disclosure Rule and other applicable federal, state and local laws.

87. Respondent certifies that it is complying with the Lead Act and the Disclosure Rule.

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

89. 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.

90. Each party agrees to bear its own costs and attorneys fees in this action.

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

Consent Agreement and Final Order
In the Matter of: Lake Forest College
Docket No. TSCA-05-2025-0013

1- 15- 2025
Date

Kevin Howley
Vice President, Finance and Institutional Planning
Lake Forest College

United States Environmental Protection Agency, Complainant

MICHAEL HARRIS

Digitally signed by MICHAEL HARRIS
Date: 2025.01.22 12:39:48 -06'00'

Michael D. Harris
Director
Enforcement and Compliance Assurance Division

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: 2025.01.23 15:53:41 -06'00'

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

Attachment 1

Project 1 Work Plan:

RRP and Abatement Work in Rental Units

Lake Forest College will complete an abatement and renovation, repair, and painting ("RRP") project covering all the rental units identified in the 2022 Notice of Violation. The abatement and RRP work will begin in February 2025 and end in approximately June 2025. Weather may delay the exterior work. If this occurs, the certified contractor will proceed to the interior of the next unit. Each unit is expected to take one week. The schedule reflects a two-week buffer period at the end to accommodate any weather-related delays to exterior work.

Lake Forest College will contract the work scope through an Illinois Department of Public Health ("IDPH") Lead Abatement Contractor and Renovation, Repair, and Painting Program ("RRP") certified renovator to perform the lead-based paint RRP and abatement activities. Enviroplus has provided the appropriate certifications into the work plans attached to this Order. The scope of the RRP and abatement activities has been developed based on the lead-based paint conditions observed by True North in June 2023. The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the units have since deteriorated, the Enviroplus shall proactively mitigate or abate any potential lead hazards. In addition, Enviroplus shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.

Following the conclusion of the lead mitigation and abatement activities, clearance wipe sampling shall be performed for each interior work area. Enviroplus shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls. Air monitoring may be performed during RRP and abatement activities at the discretion of Lake Forest College to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration ("OSHA") exposure limits outside mitigation/abatement areas.

Abatement Project Proposed Calendar

Abatement and RRP Schedule:

Unit	Anticipated Start Date	Anticipated Completion Date
10 Campus Circle	February 3, 2025	February 10, 2025
11 Campus Circle	February 10, 2025	February 17, 2025
12 Campus Circle	February 17, 2025	February 24, 2025
14 & 15 Campus Circle	February 24, 2025	March 3, 2025
16 & 17 Campus Circle	March 3, 2025	March 10, 2025
18 Campus Circle	March 10, 2025	March 17, 2025
19 Campus Circle	March 17, 2025	March 24, 2025
22 & 23 South Campus Circle	March 24, 2025	March 31, 2025
24 & 25 South Campus Circle	March 31, 2025	April 7, 2025
28 & 29 Campus Circle	April 7, 2025	April 14, 2025
241 Washington Road	April 14, 2025	April 21, 2025
329 & 331 Washington Road	April 21, 2025	April 28, 2025
339 & 341 Washington Road	April 28, 2025	May 5, 2025
674 Illinois Road	May 5, 2025	May 12, 2025
676 & 678 Cherry Avenue	May 12, 2025	May 19, 2025
680 & 682 Cherry Avenue	May 26, 2025	June 15, 2025

Weather conditions may delay the exterior work. If this occurs, Enviroplus will proceed to the interior of the next unit. Each unit is anticipated to take one week. The schedule reflects a two-week buffer period at the end to accommodate any weather-related delays to exterior work.

TRUE NORTH CONSULTANTS

LEAD-BASED PAINT MITIGATION / ABATEMENT PROTOCOL

Single-Family Residential Structure
10 Campus Circle
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
Lake Forest, Illinois 60045

Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

Table of Contents

SECTION 1
WORK PLAN

WORK PLAN
Lake Forest College – 10 Campus Circle

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (contractor) at the single-family residential structure located at 10 Campus Circle in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was identified on the interior and exterior of the structure. The following is a summary of identified lead-based paint locations and observations:

- Interior:
    - LBP was identified on painted wood windowsills, the plaster ceiling, and the painted east wood door panel within the kitchen (northwest room). The paint is in good/intact condition.
    - LBP was identified on painted wood windowsills and window casings, and on painted wood baseboards within the dining room (southwest room). The paint is in good/intact condition.
    - LBP was identified on painted wood windowsills and window casings, on painted wood baseboards, and plaster walls within the 1st floor south bathroom. The paint is in good/intact condition.
    - LBP was identified on plaster walls within the 2nd floor east bathroom (master bathroom). The paint is in good/intact condition.
    - LBP was identified on plaster walls within the 3rd floor southeast bathroom. In addition, the plaster ceiling should be treated as LBP-containing. The paint is in good/intact condition.
- Exterior:
    - LBP was identified on the front porch (south side) support columns and fascia. However, it appears the original wood components that contain the LBP are enclosed / concealed by newer metal casing.
    - LBP was identified on the back awning fascia (north side). However, it appears the original wood fascia that contains the LBP is enclosed / concealed by newer metal casing.

The following components were inaccessible and unable to be tested at the time of the Inspection, and are assumed to contain lead-based paint:

- Exterior upper-level trim (metal, white, good/intact condition) (only tested in location).
- Exterior basement window system.

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

   - Lead-Based Paint Abatement
     - Perform component removal of the wood door panel within the kitchen (northwest room).
     - Perform component removal of the interior wood windowsills within the kitchen (northwest room), dining room (southwest room), and 1st floor south bathroom.

   - Monitoring
     - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection. The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have

been HEPA vacuumed and wet wiped and are free of visible dust and debris at the completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS
Lake Forest College – 10 Campus Circle

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work
This Specification covers the following:
- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance
All lead-based paint hazard control work must comply with the following:
- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- EPA Renovation, Repair, and Painting (RRP) Rule (40 CFR Part 745).
- Occupational Safety and Health Administration (OSHA) regulations for worker safety (29 CFR 1926.62).
- Resource Conservation and Recovery Act (RCRA) guidelines for managing hazardous waste (40 CFR Part 261).
- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods
Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

- Wet scrape loose, chipping, or peeling paint to a well adhered surface.
- Wet sanding or power sanding with HEPA-filtered tools.
- Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

- **Component Replacement**
  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
    - Ensure proper disposal of lead-painted components according to local and federal regulations.
  - **Applications:** Ideal for components in poor condition or those exposed to high levels of friction or impact.

- **Soil Abatement**
  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
    - **Soil removal:** Excavate and remove lead-contaminated soil and replace it with clean fill or landscaping material.
    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

  - Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
  - Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
  - Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
  - Conduct thorough wet cleaning and HEPA vacuuming post-completion.
  - Remove all generated dust/debris throughout the work area and containerize for disposal.
  - Dry sweeping or other methods that may result in the generation and migration of potentially contaminated dust shall prohibited at all times.
- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

6) Waste Disposal

- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
- Dispose of concentrated lead wastes separately from architectural components.
- Subject concentrated wastes to TCLP test to determine waste classification.
- Prepare a waste shipment record, to be signed by the generator, shipper, and disposal site.
- Architectural components, other items to which lead-based paint remains adhered, and cleaned plastic sheeting may be disposed of as common construction and demolition debris.

7) Worker Safety

- **Training and Certification:** All workers must be trained and certified in lead-safe work practices in compliance with EPA's RRP rule.
- **Personal Protective Equipment (PPE):** Workers must wear proper PPE, including respirators, gloves, disposable coveralls, and protective eyewear. Contractor shall assure that no employee is exposed to lead at concentrations greater than the OSHA Permissible Exposure Limit (PEL) of 50 ug/m^3.
- **Decontamination:** Decontamination procedures must be followed to prevent the spread of lead dust, including removing and disposing of contaminated PPE before leaving the worksite. Hand washing stations shall be present at the work site.

8) Occupant Protection

- **Notification:** Occupants must be informed about the nature and timeline of the lead hazard control work.
- **Relocation:** Temporary relocation of residents, particularly children and pregnant women, may be required during high-risk abatement activities.

- **Worksite Containment:** Work areas must be contained to prevent the spread of lead dust or debris into living areas, using plastic sheeting, temporary barriers, and warning signs.

9) Clearance Testing

Post-abatement and interim control clearance testing is required to ensure lead hazards have been sufficiently mitigated.

- **Testing Protocol:** A certified lead inspector or risk assessor must collect dust wipe samples for all interior work areas from floors, window sills, and other horizontal surfaces. Additionally, soil samples shall be collected for all exterior work areas where bare soil is present.
- **Standards:** Clearance levels must meet HUD and EPA requirements:
    - Floors: less than 10 µg/ft².
    - Window sills: less than 100 µg/ft².
    - Window wells: less than 400 µg/ft².
    - Soil:
        - Play areas: less than 400 ppm of lead.
        - Non-play areas: less than 1,200 ppm of lead.
- **Retesting:** If clearance fails, re-cleaning and retesting must be performed until the clearance criteria are met.

10) Record Keeping and Documentation

- Contractors must keep detailed records of all interim control and abatement activities, including methods used, dates of work, personnel involved, and results of clearance testing.
- Property owners must retain documentation of lead-based paint hazard control for future reference, particularly for real estate transactions or tenant disclosure.

11) Warranty and Follow-Up

- **Interim Controls:** Require annual inspections and maintenance to ensure continued effectiveness.
- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

12) Final Inspection

A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

APPENDIX A

Licenses and Accreditations

EH0190951

Illinois Department of PUBLIC HEALTH

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

DIVISION OF ENVIRONMENTAL HEALTH
LEAD PROGRAM

Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

Enviroplus, Inc

LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

The face of this license has a colored background. Printed by Authority of the State of Illinois • P.O. #EH-21-044

TRUE NORTH
CONSULTANTS

LEAD-BASED PAINT MITIGATION / ABATEMENT PROTOCOL

Single-Family Residential Structure
11 Campus Circle
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
Lake Forest, Illinois 60045

Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

Table of Contents

SECTION 1

WORK PLAN

WORK PLAN
Lake Forest College – 11 Campus Circle

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (contractor) at the single-family residential structure located at 11 Campus Circle in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was identified on the interior of the structure. The following is a summary of identified lead-based paint locations and observations:

- Interior:
    - LBP was identified on painted wood door systems (case, jamb, panel) throughout the interior of the structure. The paint is in good/intact condition.
    - LBP was identified on painted wood windowsills and window casings within the kitchen and dining room (1st floor east-central room). The paint is in good/intact condition.
    - LBP was identified on painted wood crown molding within the dining room, 2nd floor east-central bedroom, and 2nd floor south bedroom. The paint is in good/intact condition.
    - LBP was identified on painted wood baseboard within the 2nd floor south bedroom and 3rd floor northeast bedroom. The paint is in good/intact condition.
- Exterior:
    - LBP was not identified on tested surfaces on the exterior of the structure.

The following components were inaccessible and unable to be tested at the time of the Inspection, and are assumed to contain lead-based paint:

- Exterior upper-level trim (metal, white, good/intact condition) (only tested in location).
- Exterior basement window systems.

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

    - Lead-Based Paint Abatement
        - Perform component removal of the wood door systems (case, jamb, panel) throughout the interior of the structure.
        - Perform component removal of the interior wood windowsills within the kitchen and dining room (1st floor east-central room).

    - Monitoring
        - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection. The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have been HEPA vacuumed and wet wiped and are free of visible dust and debris at the completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational

Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS
Lake Forest College – 11 Campus Circle

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work
This Specification covers the following:
- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance
All lead-based paint hazard control work must comply with the following:
- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- EPA Renovation, Repair, and Painting (RRP) Rule (40 CFR Part 745).
- Occupational Safety and Health Administration (OSHA) regulations for worker safety (29 CFR 1926.62).
- Resource Conservation and Recovery Act (RCRA) guidelines for managing hazardous waste (40 CFR Part 261).
- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods
Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

- Wet scrape loose, chipping, or peeling paint to a well adhered surface.
- Wet sanding or power sanding with HEPA-filtered tools.
- Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

- **Component Replacement**
  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
    - Ensure proper disposal of lead-painted components according to local and federal regulations.
  - **Applications:** Ideal for components in poor condition or those exposed to high levels of friction or impact.

- **Soil Abatement**
  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
    - **Soil removal:** Excavate and remove lead-contaminated soil and replace it with clean fill or landscaping material.
    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

  - Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
  - Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
  - Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
  - Conduct thorough wet cleaning and HEPA vacuuming post-completion.
  - Remove all generated dust/debris throughout the work area and containerize for disposal.
  - Dry sweeping or other methods that may result in the generation and migration of potentially contaminated dust shall prohibited at all times.
- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

6) Waste Disposal

- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
- Dispose of concentrated lead wastes separately from architectural components.
- Subject concentrated wastes to TCLP test to determine waste classification.
- Prepare a waste shipment record, to be signed by the generator, shipper, and disposal site.
- Architectural components, other items to which lead-based paint remains adhered, and cleaned plastic sheeting may be disposed of as common construction and demolition debris.

7) Worker Safety

- **Training and Certification:** All workers must be trained and certified in lead-safe work practices in compliance with EPA's RRP rule.
- **Personal Protective Equipment (PPE):** Workers must wear proper PPE, including respirators, gloves, disposable coveralls, and protective eyewear. Contractor shall assure that no employee is exposed to lead at concentrations greater than the OSHA Permissible Exposure Limit (PEL) of 50 ug/m^3.
- **Decontamination:** Decontamination procedures must be followed to prevent the spread of lead dust, including removing and disposing of contaminated PPE before leaving the worksite. Hand washing stations shall be present at the work site.

8) Occupant Protection

- **Notification:** Occupants must be informed about the nature and timeline of the lead hazard control work.
- **Relocation:** Temporary relocation of residents, particularly children and pregnant women, may be required during high-risk abatement activities.

- **Worksite Containment:** Work areas must be contained to prevent the spread of lead dust or debris into living areas, using plastic sheeting, temporary barriers, and warning signs.

9) Clearance Testing

Post-abatement and interim control clearance testing is required to ensure lead hazards have been sufficiently mitigated.

- **Testing Protocol:** A certified lead inspector or risk assessor must collect dust wipe samples for all interior work areas from floors, window sills, and other horizontal surfaces. Additionally, soil samples shall be collected for all exterior work areas where bare soil is present.
- **Standards:** Clearance levels must meet HUD and EPA requirements:
    - Floors: less than 10 µg/ft².
    - Window sills: less than 100 µg/ft².
    - Window wells: less than 400 µg/ft².
    - Soil:
        - Play areas: less than 400 ppm of lead.
        - Non-play areas: less than 1,200 ppm of lead.
- **Retesting:** If clearance fails, re-cleaning and retesting must be performed until the clearance criteria are met.

10) Record Keeping and Documentation

- Contractors must keep detailed records of all interim control and abatement activities, including methods used, dates of work, personnel involved, and results of clearance testing.
- Property owners must retain documentation of lead-based paint hazard control for future reference, particularly for real estate transactions or tenant disclosure.

11) Warranty and Follow-Up

- **Interim Controls:** Require annual inspections and maintenance to ensure continued effectiveness.
- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

12) Final Inspection

A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

APPENDIX A

Licenses and Accreditations

EH0190951

Illinois Department of PUBLIC HEALTH

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

DIVISION OF ENVIRONMENTAL HEALTH
LEAD PROGRAM

Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

Enviroplus, Inc

LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

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TRUE NORTH
CONSULTANTS

LEAD-BASED PAINT MITIGATION / ABATEMENT PROTOCOL

Single-Family Residential Structure
12 Campus Circle
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
Lake Forest, Illinois 60045

Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

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SECTION 1
WORK PLAN

WORK PLAN
Lake Forest College – 12 Campus Circle

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (contractor) at the single-family residential structure located at 12 Campus Circle in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was identified on the interior and exterior of the structure. The following is a summary of identified lead-based paint locations and observations:

- Interior:
    - LBP was identified on the painted wood window framing components (case, sill, apron) within the kitchen and southeast dining room. The paint is in good/intact condition.
    - LBP was identified on the plaster ceiling within the basement staircase. The paint is in good/intact condition.
    - LBP was identified on the plaster walls within the 1st floor west-central bathroom. The paint is in good/intact condition.
    - LBP was identified on the south plaster wall within the kitchen. The paint is in good/intact condition.
    - LBP was identified on the plaster walls and ceiling within the 1st floor northwest room (office). The paint is in good/intact condition.
    - LBP was identified on the north plaster wall and on the central wood wall trim within the 2nd floor northeast bathroom. The paint is in good/intact condition.
    - LBP was identified on the central wood wall trim within the 2nd floor southeast bathroom (master). The paint is in good/intact condition.
    - LBP was identified on the plaster ceiling within the 3rd floor south bathroom. The paint is in good/intact condition.
    - LBP was identified on painted wood crown molding and painted wood baseboards throughout the structure. The paint is in good/intact condition.

- LBP was identified on painted wood door systems (case, jamb, panel) throughout the structure. The paint is in good/intact condition.

- Exterior:

  - LBP was identified on the upper-level metal decorative window trim. However, it appears the original wood trim that contains the LBP is enclosed / concealed by newer metal casing.

  - LBP was identified on the stucco siding above windows on the west side of the structure and on the sides of the back porch. The paint is in good/intact condition.

The following components were inaccessible and unable to be tested at the time of the Inspection, and are assumed to contain lead-based paint:

- Exterior upper-level trim (metal, white, good/intact condition).

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

   - Lead-Based Paint Abatement
     - Perform component removal of the wood door systems (case, jamb, panel) throughout the interior of the structure.
     - Perform component removal of the interior wood windowsills within the kitchen and southeast dining room.

   - Monitoring
     - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection. The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have been HEPA vacuumed and wet wiped and are free of visible dust and debris at the completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS
Lake Forest College – 12 Campus Circle

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work
This Specification covers the following:
- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance
All lead-based paint hazard control work must comply with the following:
- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- EPA Renovation, Repair, and Painting (RRP) Rule (40 CFR Part 745).
- Occupational Safety and Health Administration (OSHA) regulations for worker safety (29 CFR 1926.62).
- Resource Conservation and Recovery Act (RCRA) guidelines for managing hazardous waste (40 CFR Part 261).
- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods
Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

- Wet scrape loose, chipping, or peeling paint to a well adhered surface.
- Wet sanding or power sanding with HEPA-filtered tools.
- Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

- **Component Replacement**
  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
    - Ensure proper disposal of lead-painted components according to local and federal regulations.
  - **Applications:** Ideal for components in poor condition or those exposed to high levels of friction or impact.

- **Soil Abatement**
  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
    - **Soil removal:** Excavate and remove lead-contaminated soil and replace it with clean fill or landscaping material.
    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

  - Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
  - Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
  - Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
  - Conduct thorough wet cleaning and HEPA vacuuming post-completion.
  - Remove all generated dust/debris throughout the work area and containerize for disposal.
  - Dry sweeping or other methods that may result in the generation and migration of potentially contaminated dust shall prohibited at all times.
- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

6) Waste Disposal

- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
- Dispose of concentrated lead wastes separately from architectural components.
- Subject concentrated wastes to TCLP test to determine waste classification.
- Prepare a waste shipment record, to be signed by the generator, shipper, and disposal site.
- Architectural components, other items to which lead-based paint remains adhered, and cleaned plastic sheeting may be disposed of as common construction and demolition debris.

7) Worker Safety

- **Training and Certification:** All workers must be trained and certified in lead-safe work practices in compliance with EPA's RRP rule.
- **Personal Protective Equipment (PPE):** Workers must wear proper PPE, including respirators, gloves, disposable coveralls, and protective eyewear. Contractor shall assure that no employee is exposed to lead at concentrations greater than the OSHA Permissible Exposure Limit (PEL) of 50 ug/m^3.
- **Decontamination:** Decontamination procedures must be followed to prevent the spread of lead dust, including removing and disposing of contaminated PPE before leaving the worksite. Hand washing stations shall be present at the work site.

8) Occupant Protection

- **Notification:** Occupants must be informed about the nature and timeline of the lead hazard control work.
- **Relocation:** Temporary relocation of residents, particularly children and pregnant women, may be required during high-risk abatement activities.

- **Worksite Containment:** Work areas must be contained to prevent the spread of lead dust or debris into living areas, using plastic sheeting, temporary barriers, and warning signs.

9) Clearance Testing

Post-abatement and interim control clearance testing is required to ensure lead hazards have been sufficiently mitigated.

- **Testing Protocol:** A certified lead inspector or risk assessor must collect dust wipe samples for all interior work areas from floors, window sills, and other horizontal surfaces. Additionally, soil samples shall be collected for all exterior work areas where bare soil is present.
- **Standards:** Clearance levels must meet HUD and EPA requirements:
    - Floors: less than 10 µg/ft².
    - Window sills: less than 100 µg/ft².
    - Window wells: less than 400 µg/ft².
    - Soil:
        - Play areas: less than 400 ppm of lead.
        - Non-play areas: less than 1,200 ppm of lead.
- **Retesting:** If clearance fails, re-cleaning and retesting must be performed until the clearance criteria are met.

10) Record Keeping and Documentation

- Contractors must keep detailed records of all interim control and abatement activities, including methods used, dates of work, personnel involved, and results of clearance testing.
- Property owners must retain documentation of lead-based paint hazard control for future reference, particularly for real estate transactions or tenant disclosure.

11) Warranty and Follow-Up

- **Interim Controls:** Require annual inspections and maintenance to ensure continued effectiveness.
- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

12) Final Inspection

A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

APPENDIX A

Licenses and Accreditations

EH0190951

Illinois Department of PUBLIC HEALTH

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

DIVISION OF ENVIRONMENTAL HEALTH
LEAD PROGRAM

Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

Enviroplus, Inc

LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

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TRUE NORTH
CONSULTANTS

LEAD-BASED PAINT MITIGATION / ABATEMENT PROTOCOL

Single-Family Residential Structure
14 & 15 Campus Circle
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
Lake Forest, Illinois 60045

Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

Table of Contents

SECTION 1

WORK PLAN

WORK PLAN
Lake Forest College – 14 & 15 Campus Circle

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (Contractor) at the single-family residential structure located at 14 & 15 Campus Circle in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was identified on the interior and exterior of the structure. The following is a summary of identified lead-based paint locations and observations:

- Unit 14 Interior:
    - LBP was not identified within the interior of Unit 14.
- Unit 15 Interior:
    - LBP was identified on the radiator in the 2nd floor north bathroom. The paint was in good/intact condition.
- Exterior (Both Units Combined):
    - LBP was identified on exterior window troughs and window casings (excluding basement windows). However, it appears the original wood troughs and casings that contain the LBP are enclosed/concealed by newer metal casings.
    - LBP was identified on the inner wood door casing on the front/main entry doors (north side). The paint is in good/intact condition.
    - LBP was identified on the outer metal door casing of the east side door. However, it appears the original wood casing that contains the LBP is enclosed/concealed by newer metal casework.
- The following components were inaccessible and unable to be tested at the time of the Inspection, and are assumed to contain lead-based paint:
    - Exterior upper-level trim (wood, white, poor condition).
    - Exterior upper-level gutters (metal, brown, good/intact condition).
    - Exterior upper-level siding (vinyl, white, good/intact condition).

- Exterior attic window system (wood, white, poor condition).

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

   - Lead-Based Paint Abatement
     - Perform component removal of the wood door casing on the front/main entry doors (north side of structure).
     - Perform removal of the attic window systems in their entirety. It should be noted that the paint is currently “assumed” to be lead-based paint, and the Owner may elect to test the paint to determine the presence or absence of lead-based paint prior to mitigation / abatement activities.

   - Lead-Based Paint Interim Controls
     - Perform lead-based paint stabilization on the exterior upper-level wood trim, gutters, and upper-level siding. The Contractor / Owner may elect to utilize other mitigation or abatement methods if preferred. It should also be noted that the paint is currently “assumed” to be lead-based paint, and the Owner may elect to test the paint to determine the presence or absence of lead-based paint prior to mitigation / abatement activities.
     - Following stabilization, surfaces shall be primed and painted with non-lead containing coatings.

   - Monitoring
     - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection. The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.
     - Contractor shall verify that the metal door casing of the west side door is encasing the old wood frames and no friction is taking place on the old frames.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas

are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have been HEPA vacuumed and wet wiped and are free of visible dust and debris at the completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS
Lake Forest College – 14 & 15 Campus Circle

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work
This Specification covers the following:
- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance
All lead-based paint hazard control work must comply with the following:
- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- EPA Renovation, Repair, and Painting (RRP) Rule (40 CFR Part 745).
- Occupational Safety and Health Administration (OSHA) regulations for worker safety (29 CFR 1926.62).
- Resource Conservation and Recovery Act (RCRA) guidelines for managing hazardous waste (40 CFR Part 261).
- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods
Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

- Wet scrape loose, chipping, or peeling paint to a well adhered surface.
- Wet sanding or power sanding with HEPA-filtered tools.
- Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

- **Component Replacement**
  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
    - Ensure proper disposal of lead-painted components according to local and federal regulations.
  - **Applications:** Ideal for components in poor condition or those exposed to high levels of friction or impact.

- **Soil Abatement**
  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
    - **Soil removal:** Excavate and remove lead-contaminated soil and replace it with clean fill or landscaping material.
    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

  - Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
  - Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
  - Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
  - Conduct thorough wet cleaning and HEPA vacuuming post-completion.
  - Remove all generated dust/debris throughout the work area and containerize for disposal.
  - Dry sweeping or other methods that may result in the generation and migration of potentially contaminated dust shall prohibited at all times.
- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

6) Waste Disposal

- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
- Dispose of concentrated lead wastes separately from architectural components.
- Subject concentrated wastes to TCLP test to determine waste classification.
- Prepare a waste shipment record, to be signed by the generator, shipper, and disposal site.
- Architectural components, other items to which lead-based paint remains adhered, and cleaned plastic sheeting may be disposed of as common construction and demolition debris.

7) Worker Safety

- **Training and Certification:** All workers must be trained and certified in lead-safe work practices in compliance with EPA's RRP rule.
- **Personal Protective Equipment (PPE):** Workers must wear proper PPE, including respirators, gloves, disposable coveralls, and protective eyewear. Contractor shall assure that no employee is exposed to lead at concentrations greater than the OSHA Permissible Exposure Limit (PEL) of 50 ug/m^3.
- **Decontamination:** Decontamination procedures must be followed to prevent the spread of lead dust, including removing and disposing of contaminated PPE before leaving the worksite. Hand washing stations shall be present at the work site.

8) Occupant Protection

- **Notification:** Occupants must be informed about the nature and timeline of the lead hazard control work.
- **Relocation:** Temporary relocation of residents, particularly children and pregnant women, may be required during high-risk abatement activities.

- **Worksite Containment:** Work areas must be contained to prevent the spread of lead dust or debris into living areas, using plastic sheeting, temporary barriers, and warning signs.

9) Clearance Testing

Post-abatement and interim control clearance testing is required to ensure lead hazards have been sufficiently mitigated.

- **Testing Protocol:** A certified lead inspector or risk assessor must collect dust wipe samples for all interior work areas from floors, window sills, and other horizontal surfaces. Additionally, soil samples shall be collected for all exterior work areas where bare soil is present.
- **Standards:** Clearance levels must meet HUD and EPA requirements:
    - Floors: less than 10 µg/ft².
    - Window sills: less than 100 µg/ft².
    - Window wells: less than 400 µg/ft².
    - Soil:
        - Play areas: less than 400 ppm of lead.
        - Non-play areas: less than 1,200 ppm of lead.
- **Retesting:** If clearance fails, re-cleaning and retesting must be performed until the clearance criteria are met.

10) Record Keeping and Documentation

- Contractors must keep detailed records of all interim control and abatement activities, including methods used, dates of work, personnel involved, and results of clearance testing.
- Property owners must retain documentation of lead-based paint hazard control for future reference, particularly for real estate transactions or tenant disclosure.

11) Warranty and Follow-Up

- **Interim Controls:** Require annual inspections and maintenance to ensure continued effectiveness.
- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

12) Final Inspection

A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Lead Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

APPENDIX A

Licenses and Accreditations

EH0190951

Illinois Department of PUBLIC HEALTH

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

DIVISION OF ENVIRONMENTAL HEALTH
LEAD PROGRAM

Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

Enviroplus, Inc

LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

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TRUE NORTH CONSULTANTS

LEAD-BASED PAINT MITIGATION / ABATEMENT PROTOCOL

Single-Family Residential Structure
16 & 17 Campus Circle
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
Lake Forest, Illinois 60045

Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

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SECTION 1

WORK PLAN

WORK PLAN
Lake Forest College – 16 & 17 Campus Circle

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (Contractor) at the single-family residential structure located at 16 & 17 Campus Circle in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was identified on the interior and exterior of the structure. The following is a summary of identified lead-based paint locations and observations:

- Unit 16 Interior:
    - LBP was identified on the plaster ceiling within the 2nd floor southwest bedroom. The paint is in good/intact condition.
- Unit 17 Interior:
    - LBP was not identified within the interior of Unit 17.
- Exterior (Both Units Combined):
    - LBP was identified on exterior window troughs (excluding basement windows). However, it appears the original wood troughs that contain the LBP are enclosed/concealed by newer metal casings.
    - LBP was also identified on the exterior metal window casings on the west side of the structure. However, it appears the original wood casings that contain the LBP are enclosed/concealed by newer metal casings.
    - LBP was identified on the inner wood door casing on the front/main entry doors (north side). The paint is in good/intact condition.
    - LBP was identified on the outer metal door casing of the west side door. However, it appears the original wood casing that contains the LBP is enclosed/concealed by newer metal casing.
- The following components were inaccessible and unable to be tested at the time of the Inspection, and are assumed to contain lead-based paint:
    - Exterior upper-level trim (wood, white, good/intact condition).

- Exterior upper-level gutters (metal, brown, good/intact condition).
- Exterior upper-level siding (vinyl, white, good/intact condition).
- Exterior attic window system (wood, white, good/intact condition).

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

   - Lead-Based Paint Abatement
     - Perform component removal of the wood door casing on the front/main entry doors (north side of structure).
     - Perform removal of the attic window systems in their entirety. It should be noted that the paint is currently “assumed” to be lead-based paint, and the Owner may elect to test the paint to determine the presence or absence of lead-based paint prior to mitigation / abatement activities.

   - Monitoring
     - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection. The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have

been HEPA vacuumed and wet wiped and are free of visible dust and debris at the completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS
Lake Forest College – 16 & 17 Campus Circle

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work

This Specification covers the following:

- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance

All lead-based paint hazard control work must comply with the following:

- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- EPA Renovation, Repair, and Painting (RRP) Rule (40 CFR Part 745).
- Occupational Safety and Health Administration (OSHA) regulations for worker safety (29 CFR 1926.62).
- Resource Conservation and Recovery Act (RCRA) guidelines for managing hazardous waste (40 CFR Part 261).
- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods

Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

- Wet scrape loose, chipping, or peeling paint to a well adhered surface.
- Wet sanding or power sanding with HEPA-filtered tools.
- Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

- **Component Replacement**
  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
    - Ensure proper disposal of lead-painted components according to local and federal regulations.
  - **Applications:** Ideal for components in poor condition or those exposed to high levels of friction or impact.

- **Soil Abatement**
  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
    - **Soil removal:** Excavate and remove lead-contaminated soil and replace it with clean fill or landscaping material.
    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

  - Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
  - Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
  - Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
  - Conduct thorough wet cleaning and HEPA vacuuming post-completion.
  - Remove all generated dust/debris throughout the work area and containerize for disposal.
  - Dry sweeping or other methods that may result in the generation and migration of potentially contaminated dust shall prohibited at all times.
- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

6) Waste Disposal

- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
- Dispose of concentrated lead wastes separately from architectural components.
- Subject concentrated wastes to TCLP test to determine waste classification.
- Prepare a waste shipment record, to be signed by the generator, shipper, and disposal site.
- Architectural components, other items to which lead-based paint remains adhered, and cleaned plastic sheeting may be disposed of as common construction and demolition debris.

7) Worker Safety

- **Training and Certification:** All workers must be trained and certified in lead-safe work practices in compliance with EPA's RRP rule.
- **Personal Protective Equipment (PPE):** Workers must wear proper PPE, including respirators, gloves, disposable coveralls, and protective eyewear. Contractor shall assure that no employee is exposed to lead at concentrations greater than the OSHA Permissible Exposure Limit (PEL) of 50 ug/m^3.
- **Decontamination:** Decontamination procedures must be followed to prevent the spread of lead dust, including removing and disposing of contaminated PPE before leaving the worksite. Hand washing stations shall be present at the work site.

8) Occupant Protection

- **Notification:** Occupants must be informed about the nature and timeline of the lead hazard control work.
- **Relocation:** Temporary relocation of residents, particularly children and pregnant women, may be required during high-risk abatement activities.

- **Worksite Containment:** Work areas must be contained to prevent the spread of lead dust or debris into living areas, using plastic sheeting, temporary barriers, and warning signs.

9) Clearance Testing

Post-abatement and interim control clearance testing is required to ensure lead hazards have been sufficiently mitigated.

- **Testing Protocol:** A certified lead inspector or risk assessor must collect dust wipe samples for all interior work areas from floors, window sills, and other horizontal surfaces. Additionally, soil samples shall be collected for all exterior work areas where bare soil is present.
- **Standards:** Clearance levels must meet HUD and EPA requirements:
    - Floors: less than 10 µg/ft².
    - Window sills: less than 100 µg/ft².
    - Window wells: less than 400 µg/ft².
    - Soil:
        - Play areas: less than 400 ppm of lead.
        - Non-play areas: less than 1,200 ppm of lead.
- **Retesting:** If clearance fails, re-cleaning and retesting must be performed until the clearance criteria are met.

10) Record Keeping and Documentation

- Contractors must keep detailed records of all interim control and abatement activities, including methods used, dates of work, personnel involved, and results of clearance testing.
- Property owners must retain documentation of lead-based paint hazard control for future reference, particularly for real estate transactions or tenant disclosure.

11) Warranty and Follow-Up

- **Interim Controls:** Require annual inspections and maintenance to ensure continued effectiveness.
- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

12) Final Inspection

A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Lead Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

APPENDIX A

Licenses and Accreditations

EH0190951

Illinois Department of PUBLIC HEALTH

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

DIVISION OF ENVIRONMENTAL HEALTH
LEAD PROGRAM

Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

Enviroplus, Inc

LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

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TRUE NORTH
CONSULTANTS

LEAD-BASED PAINT MITIGATION / ABATEMENT PROTOCOL

Single-Family Residential Structure
18 Campus Circle
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
Lake Forest, Illinois 60045

Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

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SECTION 1

WORK PLAN

WORK PLAN
Lake Forest College – 18 Campus Circle

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (Contractor) at the single-family residential structure located at 18 Campus Circle in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was identified on the interior and exterior of the structure. The following is a summary of identified lead-based paint locations and observations

- Interior:
  - LBP was identified on the painted pipe within the basement staircase area. The paint is in good/intact condition.
  - LBP was identified on plaster walls in the 1st floor west side room. The paint is in good/intact condition.
  - LBP was identified on the wood fireplace shelving in the north living room. The paint is in good/intact condition.
  - LBP was identified on the south plaster wall in the 2nd floor master bathroom. The paint is in good/intact condition.
  - LBP was identified on radiators in the 2nd floor south-central bathroom and 3rd floor southwest bedroom. The paint is in good/intact condition.
- Exterior:
  - LBP was identified on exterior window troughs (excluding basement window cases). However, it appears the original wood troughs that contain the LBP are enclosed/concealed by newer metal casings.
  - LBP was identified on the exterior metal window casing on one basement window on the east side of the structure (window 2). However, it appears the original wood troughs that contain the LBP are enclosed/concealed by newer metal casings.
  - LBP was identified on the fascia. However, it appears the original wood fascia that contains the LBP is enclosed/concealed by newer metal casing.

- LBP was identified on the wood door casing on the front/main entry door (east side). The paint is in poor condition.
- LBP was identified on front door (east side) overhang components including fascia and support beams. However, it appears the original wood components that contain the LBP are enclosed/concealed by newer metal casework.

The following components were inaccessible and unable to be tested at the time of the Inspection, and are assumed to contain lead-based paint:

- Exterior soffit (metal, beige, good/intact condition) (tested negative only in one location)
- Exterior upper-level trim (wood, beige, good/intact condition).
- Exterior upper-level gutters (metal, brown, good/intact condition).
- Exterior upper-level decorative window trim (metal, white, good/intact condition).

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

   - Lead-Based Paint Abatement
     - Perform component removal of the wood door casing on the front/main entry door (east side).

   - Monitoring
     - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection. The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have been HEPA vacuumed and wet wiped and are free of visible dust and debris at the completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS
Lake Forest College – 18 Campus Circle

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work
This Specification covers the following:
- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance
All lead-based paint hazard control work must comply with the following:
- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- EPA Renovation, Repair, and Painting (RRP) Rule (40 CFR Part 745).
- Occupational Safety and Health Administration (OSHA) regulations for worker safety (29 CFR 1926.62).
- Resource Conservation and Recovery Act (RCRA) guidelines for managing hazardous waste (40 CFR Part 261).
- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods
Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

- Wet scrape loose, chipping, or peeling paint to a well adhered surface.
- Wet sanding or power sanding with HEPA-filtered tools.
- Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

- **Component Replacement**
  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
    - Ensure proper disposal of lead-painted components according to local and federal regulations.
  - **Applications:** Ideal for components in poor condition or those exposed to high levels of friction or impact.

- **Soil Abatement**
  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
    - **Soil removal:** Excavate and remove lead-contaminated soil and replace it with clean fill or landscaping material.
    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

  - Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
  - Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
  - Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
  - Conduct thorough wet cleaning and HEPA vacuuming post-completion.
  - Remove all generated dust/debris throughout the work area and containerize for disposal.
  - Dry sweeping or other methods that may result in the generation and migration of potentially contaminated dust shall prohibited at all times.
- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

6) Waste Disposal

- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
- Dispose of concentrated lead wastes separately from architectural components.
- Subject concentrated wastes to TCLP test to determine waste classification.
- Prepare a waste shipment record, to be signed by the generator, shipper, and disposal site.
- Architectural components, other items to which lead-based paint remains adhered, and cleaned plastic sheeting may be disposed of as common construction and demolition debris.

7) Worker Safety

- **Training and Certification:** All workers must be trained and certified in lead-safe work practices in compliance with EPA's RRP rule.
- **Personal Protective Equipment (PPE):** Workers must wear proper PPE, including respirators, gloves, disposable coveralls, and protective eyewear. Contractor shall assure that no employee is exposed to lead at concentrations greater than the OSHA Permissible Exposure Limit (PEL) of 50 ug/m^3.
- **Decontamination:** Decontamination procedures must be followed to prevent the spread of lead dust, including removing and disposing of contaminated PPE before leaving the worksite. Hand washing stations shall be present at the work site.

8) Occupant Protection

- **Notification:** Occupants must be informed about the nature and timeline of the lead hazard control work.
- **Relocation:** Temporary relocation of residents, particularly children and pregnant women, may be required during high-risk abatement activities.

- **Worksite Containment:** Work areas must be contained to prevent the spread of lead dust or debris into living areas, using plastic sheeting, temporary barriers, and warning signs.

9) Clearance Testing

Post-abatement and interim control clearance testing is required to ensure lead hazards have been sufficiently mitigated.

- **Testing Protocol:** A certified lead inspector or risk assessor must collect dust wipe samples for all interior work areas from floors, window sills, and other horizontal surfaces. Additionally, soil samples shall be collected for all exterior work areas where bare soil is present.
- **Standards:** Clearance levels must meet HUD and EPA requirements:
    - Floors: less than 10 µg/ft².
    - Window sills: less than 100 µg/ft².
    - Window wells: less than 400 µg/ft².
    - Soil:
        - Play areas: less than 400 ppm of lead.
        - Non-play areas: less than 1,200 ppm of lead.
- **Retesting:** If clearance fails, re-cleaning and retesting must be performed until the clearance criteria are met.

10) Record Keeping and Documentation

- Contractors must keep detailed records of all interim control and abatement activities, including methods used, dates of work, personnel involved, and results of clearance testing.
- Property owners must retain documentation of lead-based paint hazard control for future reference, particularly for real estate transactions or tenant disclosure.

11) Warranty and Follow-Up

- **Interim Controls:** Require annual inspections and maintenance to ensure continued effectiveness.
- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

12) Final Inspection

A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Lead Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

APPENDIX A

Licenses and Accreditations

EH0190951

Illinois Department of PUBLIC HEALTH

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

DIVISION OF ENVIRONMENTAL HEALTH
LEAD PROGRAM

Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

Enviroplus, Inc

LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

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TRUE NORTH
CONSULTANTS

LEAD-BASED PAINT MITIGATION / ABATEMENT PROTOCOL

Single-Family Residential Structure
19 Campus Circle
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
Lake Forest, Illinois 60045

Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

Table of Contents

SECTION 1
WORK PLAN

WORK PLAN
Lake Forest College – 19 Campus Circle

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (Contractor) at the single-family residential structure located at 19 Campus Circle in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was identified on the exterior of the structure. The following is a summary of identified lead-based paint locations and observations:

- Interior:
    - LBP was not identified within the interior of the structure.
- Exterior:
    - LBP was identified on exterior window troughs and window casings (excluding basement windows). However, it appears the original wood troughs and casings that contain the LBP are enclosed/concealed by newer metal casing.
    - LBP was identified on the wood door casing on the front/main door (east side). The paint is in poor condition.
    - LBP was identified on front door (east side) overhang components including fascia and support beams. However, it appears the original wood troughs that contain the LBP are enclosed/concealed by newer metal casework.
- The following components were inaccessible and unable to be tested at the time of the Inspection, and are assumed to contain lead-based paint:
    - Exterior fascia (wood, beige, poor condition).
    - Exterior soffit (metal, beige, good/intact condition).
    - Exterior upper-level trim (wood, beige, good/intact condition).
    - Exterior upper-level decorative window trim (metal, white, good/intact).
    - Upper-level stucco siding (stucco, beige, good/intact condition).
    - Exterior – Gutters (metal, brown, good/intact condition).

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

    - Lead-Based Paint Abatement
        - Perform component removal of the wood door casing on the front/main door (east side).

    - Lead-Based Paint Interim Controls
        - Perform lead-based paint stabilization on the exterior wood fascia, soffit, upper-level trim, upper-level decorative window trim, upper-level stucco siding, and gutters. The Contractor / Owner may elect to utilize other mitigation or abatement methods if preferred. It should also be noted that the paint is currently “assumed” to be lead-based paint, and the Owner may elect to test the paint to determine the presence or absence of lead-based paint prior to mitigation / abatement activities.
        - Following stabilization, surfaces shall be primed and painted with non-lead containing coatings.

    - Monitoring
        - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection. The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have been HEPA vacuumed and wet wiped and are free of visible dust and debris at the completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS
Lake Forest College – 19 Campus Circle

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work
This Specification covers the following:
- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance
All lead-based paint hazard control work must comply with the following:
- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- EPA Renovation, Repair, and Painting (RRP) Rule (40 CFR Part 745).
- Occupational Safety and Health Administration (OSHA) regulations for worker safety (29 CFR 1926.62).
- Resource Conservation and Recovery Act (RCRA) guidelines for managing hazardous waste (40 CFR Part 261).
- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods
Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

- Wet scrape loose, chipping, or peeling paint to a well adhered surface.
- Wet sanding or power sanding with HEPA-filtered tools.
- Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

- **Component Replacement**
  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
    - Ensure proper disposal of lead-painted components according to local and federal regulations.
  - **Applications:** Ideal for components in poor condition or those exposed to high levels of friction or impact.

- **Soil Abatement**
  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
    - **Soil removal:** Excavate and remove lead-contaminated soil and replace it with clean fill or landscaping material.
    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

  - Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
  - Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
  - Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
  - Conduct thorough wet cleaning and HEPA vacuuming post-completion.
  - Remove all generated dust/debris throughout the work area and containerize for disposal.
  - Dry sweeping or other methods that may result in the generation and migration of potentially contaminated dust shall prohibited at all times.
- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

6) Waste Disposal

- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
- Dispose of concentrated lead wastes separately from architectural components.
- Subject concentrated wastes to TCLP test to determine waste classification.
- Prepare a waste shipment record, to be signed by the generator, shipper, and disposal site.
- Architectural components, other items to which lead-based paint remains adhered, and cleaned plastic sheeting may be disposed of as common construction and demolition debris.

7) Worker Safety

- **Training and Certification:** All workers must be trained and certified in lead-safe work practices in compliance with EPA's RRP rule.
- **Personal Protective Equipment (PPE):** Workers must wear proper PPE, including respirators, gloves, disposable coveralls, and protective eyewear. Contractor shall assure that no employee is exposed to lead at concentrations greater than the OSHA Permissible Exposure Limit (PEL) of 50 ug/m^3.
- **Decontamination:** Decontamination procedures must be followed to prevent the spread of lead dust, including removing and disposing of contaminated PPE before leaving the worksite. Hand washing stations shall be present at the work site.

8) Occupant Protection

- **Notification:** Occupants must be informed about the nature and timeline of the lead hazard control work.
- **Relocation:** Temporary relocation of residents, particularly children and pregnant women, may be required during high-risk abatement activities.

- **Worksite Containment:** Work areas must be contained to prevent the spread of lead dust or debris into living areas, using plastic sheeting, temporary barriers, and warning signs.

9) Clearance Testing

Post-abatement and interim control clearance testing is required to ensure lead hazards have been sufficiently mitigated.

- **Testing Protocol:** A certified lead inspector or risk assessor must collect dust wipe samples for all interior work areas from floors, window sills, and other horizontal surfaces. Additionally, soil samples shall be collected for all exterior work areas where bare soil is present.
- **Standards:** Clearance levels must meet HUD and EPA requirements:
    - Floors: less than 10 µg/ft².
    - Window sills: less than 100 µg/ft².
    - Window wells: less than 400 µg/ft².
    - Soil:
        - Play areas: less than 400 ppm of lead.
        - Non-play areas: less than 1,200 ppm of lead.
- **Retesting:** If clearance fails, re-cleaning and retesting must be performed until the clearance criteria are met.

10) Record Keeping and Documentation

- Contractors must keep detailed records of all interim control and abatement activities, including methods used, dates of work, personnel involved, and results of clearance testing.
- Property owners must retain documentation of lead-based paint hazard control for future reference, particularly for real estate transactions or tenant disclosure.

11) Warranty and Follow-Up

- **Interim Controls:** Require annual inspections and maintenance to ensure continued effectiveness.
- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

12) Final Inspection

A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Lead Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

APPENDIX A

Licenses and Accreditations

EH0190951

Illinois Department of PUBLIC HEALTH

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

DIVISION OF ENVIRONMENTAL HEALTH
LEAD PROGRAM

Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

Enviroplus, Inc

LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

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TRUE NORTH
CONSULTANTS

LEAD-BASED PAINT MITIGATION / ABATEMENT PROTOCOL

Single-Family Residential Structure
22 & 23 Campus Circle
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
Lake Forest, Illinois 60045

Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

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SECTION 1

WORK PLAN

WORK PLAN
Lake Forest College – 22 & 23 Campus Circle

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (Contractor) at the single-family residential structure located at 22 & 23 Campus Circle in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was not identified on the exterior or interior of the structure. However, the following is a summary of findings and observations of assumed lead-based paint containing components:

- The following components were inaccessible and unable to be tested at the time of the Inspection, and are assumed to contain lead-based paint:
    - Exterior soffit (wood, beige, poor condition).
    - Exterior fascia (metal, brown, intact condition).
    - Exterior upper-level window trim (north side) (wood, brown, poor condition).

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

    - Lead-Based Paint Interim Controls
        - Perform lead-based paint stabilization for the exterior wood soffit, wood fascia, and the north side upper-level wood window trim. The Contractor / Owner may elect to utilize other mitigation or abatement methods if preferred. It should also be noted that the paint is currently “assumed” to be lead-based paint, and the Owner may elect to test the paint to determine the presence or absence of lead-based paint prior to mitigation / abatement activities.
        - Following stabilization, surfaces shall be primed and painted with non-lead containing coatings.

- Monitoring
    - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection. The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have been HEPA vacuumed and wet wiped and are free of visible dust and debris at the completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS
Lake Forest College – 22 & 23 Campus Circle

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work

This Specification covers the following:

- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance

All lead-based paint hazard control work must comply with the following:

- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- EPA Renovation, Repair, and Painting (RRP) Rule (40 CFR Part 745).
- Occupational Safety and Health Administration (OSHA) regulations for worker safety (29 CFR 1926.62).
- Resource Conservation and Recovery Act (RCRA) guidelines for managing hazardous waste (40 CFR Part 261).
- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods

Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

- Wet scrape loose, chipping, or peeling paint to a well adhered surface.
- Wet sanding or power sanding with HEPA-filtered tools.
- Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

- **Component Replacement**
  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
    - Ensure proper disposal of lead-painted components according to local and federal regulations.
  - **Applications:** Ideal for components in poor condition or those exposed to high levels of friction or impact.

- **Soil Abatement**
  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
    - **Soil removal:** Excavate and remove lead-contaminated soil and replace it with clean fill or landscaping material.
    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

  - Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
  - Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
  - Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
  - Conduct thorough wet cleaning and HEPA vacuuming post-completion.
  - Remove all generated dust/debris throughout the work area and containerize for disposal.
  - Dry sweeping or other methods that may result in the generation and migration of potentially contaminated dust shall prohibited at all times.
- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

6) Waste Disposal

- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
- Dispose of concentrated lead wastes separately from architectural components.
- Subject concentrated wastes to TCLP test to determine waste classification.
- Prepare a waste shipment record, to be signed by the generator, shipper, and disposal site.
- Architectural components, other items to which lead-based paint remains adhered, and cleaned plastic sheeting may be disposed of as common construction and demolition debris.

7) Worker Safety

- **Training and Certification:** All workers must be trained and certified in lead-safe work practices in compliance with EPA's RRP rule.
- **Personal Protective Equipment (PPE):** Workers must wear proper PPE, including respirators, gloves, disposable coveralls, and protective eyewear. Contractor shall assure that no employee is exposed to lead at concentrations greater than the OSHA Permissible Exposure Limit (PEL) of 50 ug/m^3.
- **Decontamination:** Decontamination procedures must be followed to prevent the spread of lead dust, including removing and disposing of contaminated PPE before leaving the worksite. Hand washing stations shall be present at the work site.

8) Occupant Protection

- **Notification:** Occupants must be informed about the nature and timeline of the lead hazard control work.
- **Relocation:** Temporary relocation of residents, particularly children and pregnant women, may be required during high-risk abatement activities.

- **Worksite Containment:** Work areas must be contained to prevent the spread of lead dust or debris into living areas, using plastic sheeting, temporary barriers, and warning signs.

9) Clearance Testing

Post-abatement and interim control clearance testing is required to ensure lead hazards have been sufficiently mitigated.

- **Testing Protocol:** A certified lead inspector or risk assessor must collect dust wipe samples for all interior work areas from floors, window sills, and other horizontal surfaces. Additionally, soil samples shall be collected for all exterior work areas where bare soil is present.
- **Standards:** Clearance levels must meet HUD and EPA requirements:
    - Floors: less than 10 µg/ft².
    - Window sills: less than 100 µg/ft².
    - Window wells: less than 400 µg/ft².
    - Soil:
        - Play areas: less than 400 ppm of lead.
        - Non-play areas: less than 1,200 ppm of lead.
- **Retesting:** If clearance fails, re-cleaning and retesting must be performed until the clearance criteria are met.

10) Record Keeping and Documentation

- Contractors must keep detailed records of all interim control and abatement activities, including methods used, dates of work, personnel involved, and results of clearance testing.
- Property owners must retain documentation of lead-based paint hazard control for future reference, particularly for real estate transactions or tenant disclosure.

11) Warranty and Follow-Up

- **Interim Controls:** Require annual inspections and maintenance to ensure continued effectiveness.
- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

12) Final Inspection

A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Lead Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

APPENDIX A

Licenses and Accreditations

EH0190951

Illinois Department of PUBLIC HEALTH

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

DIVISION OF ENVIRONMENTAL HEALTH
LEAD PROGRAM

Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

Enviroplus, Inc

LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

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TRUE NORTH CONSULTANTS

LEAD-BASED PAINT MITIGATION / ABATEMENT PROTOCOL

Single-Family Residential Structure
24 & 25 Campus Circle
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
Lake Forest, Illinois 60045

Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

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SECTION 1

WORK PLAN

WORK PLAN
Lake Forest College – 24 & 25 Campus Circle

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (Contractor) at the single-family residential structure located at 24 & 25 Campus Circle in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was not identified on the exterior or interior of the structure. However, the following is a summary of findings and observations of assumed lead-based paint containing components:

- The following components were inaccessible and unable to be tested at the time of the Inspection, and are assumed to contain lead-based paint:
    - Exterior soffit (wood, beige, poor condition).
    - Exterior fascia (wood, brown, poor condition).
    - Exterior upper-level window trim (south side) (metal, brown, poor condition).
    - Exterior upper-level window trim (south side) (wood, brown, poor condition).

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

    - Lead-Based Paint Interim Controls
        - Perform lead-based paint stabilization for the exterior wood soffit, wood fascia, and the south side upper-level window trim (metal and wood). The Contractor / Owner may elect to utilize other mitigation or abatement methods if preferred. It should also be noted that the paint is currently “assumed” to be lead-based paint, and the Owner may elect to test the paint to determine the presence or absence of lead-based paint prior to mitigation / abatement activities.
        - Following stabilization, surfaces shall be primed and painted with non-lead containing coatings.

- Monitoring
    - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection. The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have been HEPA vacuumed and wet wiped and are free of visible dust and debris at the completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS
Lake Forest College – 24 & 25 Campus Circle

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work

This Specification covers the following:

- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance

All lead-based paint hazard control work must comply with the following:

- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- EPA Renovation, Repair, and Painting (RRP) Rule (40 CFR Part 745).
- Occupational Safety and Health Administration (OSHA) regulations for worker safety (29 CFR 1926.62).
- Resource Conservation and Recovery Act (RCRA) guidelines for managing hazardous waste (40 CFR Part 261).
- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods

Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

  - Wet scrape loose, chipping, or peeling paint to a well adhered surface.
  - Wet sanding or power sanding with HEPA-filtered tools.
  - Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

- **Component Replacement**
  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
    - Ensure proper disposal of lead-painted components according to local and federal regulations.
  - **Applications:** Ideal for components in poor condition or those exposed to high levels of friction or impact.

- **Soil Abatement**
  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
    - **Soil removal:** Excavate and remove lead-contaminated soil and replace it with clean fill or landscaping material.
    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

  - Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
  - Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
  - Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
  - Conduct thorough wet cleaning and HEPA vacuuming post-completion.
  - Remove all generated dust/debris throughout the work area and containerize for disposal.
  - Dry sweeping or other methods that may result in the generation and migration of potentially contaminated dust shall prohibited at all times.
- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

6) Waste Disposal

- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
- Dispose of concentrated lead wastes separately from architectural components.
- Subject concentrated wastes to TCLP test to determine waste classification.
- Prepare a waste shipment record, to be signed by the generator, shipper, and disposal site.
- Architectural components, other items to which lead-based paint remains adhered, and cleaned plastic sheeting may be disposed of as common construction and demolition debris.

7) Worker Safety

- **Training and Certification:** All workers must be trained and certified in lead-safe work practices in compliance with EPA's RRP rule.
- **Personal Protective Equipment (PPE):** Workers must wear proper PPE, including respirators, gloves, disposable coveralls, and protective eyewear. Contractor shall assure that no employee is exposed to lead at concentrations greater than the OSHA Permissible Exposure Limit (PEL) of 50 ug/m^3.
- **Decontamination:** Decontamination procedures must be followed to prevent the spread of lead dust, including removing and disposing of contaminated PPE before leaving the worksite. Hand washing stations shall be present at the work site.

8) Occupant Protection

- **Notification:** Occupants must be informed about the nature and timeline of the lead hazard control work.
- **Relocation:** Temporary relocation of residents, particularly children and pregnant women, may be required during high-risk abatement activities.

- **Worksite Containment:** Work areas must be contained to prevent the spread of lead dust or debris into living areas, using plastic sheeting, temporary barriers, and warning signs.

9) Clearance Testing

Post-abatement and interim control clearance testing is required to ensure lead hazards have been sufficiently mitigated.

- **Testing Protocol:** A certified lead inspector or risk assessor must collect dust wipe samples for all interior work areas from floors, window sills, and other horizontal surfaces. Additionally, soil samples shall be collected for all exterior work areas where bare soil is present.
- **Standards:** Clearance levels must meet HUD and EPA requirements:
    - Floors: less than 10 µg/ft².
    - Window sills: less than 100 µg/ft².
    - Window wells: less than 400 µg/ft².
    - Soil:
        - Play areas: less than 400 ppm of lead.
        - Non-play areas: less than 1,200 ppm of lead.
- **Retesting:** If clearance fails, re-cleaning and retesting must be performed until the clearance criteria are met.

10) Record Keeping and Documentation

- Contractors must keep detailed records of all interim control and abatement activities, including methods used, dates of work, personnel involved, and results of clearance testing.
- Property owners must retain documentation of lead-based paint hazard control for future reference, particularly for real estate transactions or tenant disclosure.

11) Warranty and Follow-Up

- **Interim Controls:** Require annual inspections and maintenance to ensure continued effectiveness.
- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

12) Final Inspection

A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Lead Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

APPENDIX A

Licenses and Accreditations

EH0190951

Illinois Department of PUBLIC HEALTH

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Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

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LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

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TRUE NORTH CONSULTANTS

LEAD-BASED PAINT MITIGATION / ABATEMENT PROTOCOL

Single-Family Residential Structure
28 & 29 Campus Circle
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
Lake Forest, Illinois 60045

Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

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SECTION 1

WORK PLAN

WORK PLAN
Lake Forest College – 28 & 29 Campus Circle

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (Contractor) at the single-family residential structure located at 28 & 29 Campus Circle in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was not identified on the exterior or interior of the structure. However, the following is a summary of findings and observations of assumed lead-based paint containing components:

- The following components were inaccessible and unable to be tested at the time of the Inspection, and are assumed to contain lead-based paint:
    - Exterior soffit (wood, beige, poor condition).
    - Exterior fascia (wood, brown, poor condition).
    - Exterior upper-level window trim (south side) (metal, brown, poor condition).
    - Exterior upper-level window trim (south side) (wood, brown, poor condition).

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

    - Lead-Based Paint Interim Controls
        - Perform lead-based paint stabilization for the exterior wood soffit, wood fascia, and the south side upper-level window trim (metal and wood). The Contractor / Owner may elect to utilize other mitigation or abatement methods if preferred. It should also be noted that the paint is currently “assumed” to be lead-based paint, and the Owner may elect to test the paint to determine the presence or absence of lead-based paint prior to mitigation / abatement activities.
        - Following stabilization, surfaces shall be primed and painted with non-lead containing coatings.

- Monitoring
    - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection. The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have been HEPA vacuumed and wet wiped and are free of visible dust and debris at the completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS
Lake Forest College – 28 & 29 Campus Circle

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work

This Specification covers the following:

- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance

All lead-based paint hazard control work must comply with the following:

- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
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- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods

Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

- Wet scrape loose, chipping, or peeling paint to a well adhered surface.
- Wet sanding or power sanding with HEPA-filtered tools.
- Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

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  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
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  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
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    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

- Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
- Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
- Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
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- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

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- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
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- **Standards:** Clearance levels must meet HUD and EPA requirements:
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    - Window wells: less than 400 µg/ft².
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- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

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A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Lead Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

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EH0190951

Illinois Department of PUBLIC HEALTH

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LEAD PROGRAM

Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

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LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

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TRUE NORTH
CONSULTANTS

LEAD-BASED PAINT MITIGATION / ABATEMENT PROTOCOL

Single-Family Residential Structure
241 Washington Road
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
Lake Forest, Illinois 60045

Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

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SECTION 1
WORK PLAN

WORK PLAN
Lake Forest College – 241 Washington Road

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (Contractor) at the single-family residential structure located at 241 Washington Road in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was identified on the exterior and interior of the structure. The following is a summary of identified lead-based paint locations and observations:

- Interior:
    - LBP was identified on the original wood window framing (case, sill, apron) throughout the interior of the structure. The paint is in good/intact condition.
    - LBP was identified on the wood stair trim located on the 1st/2nd floor staircase. The paint is in good/intact condition.
- Exterior:
    - LBP was identified on the exterior concrete foundations of the structure. The paint is in poor condition.
    - LBP was identified on the original wood windowsills on the exterior of the structure. The paint is in poor condition.
- The following components were inaccessible and unable to be tested at the time of the Inspection, and are assumed to contain lead-based paint:
    - Exterior soffit (metal, white, intact condition).
    - Exterior fascia (metal, grey, intact condition).
    - Exterior upper-level trim (metal, white, intact condition).

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator

to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

- Lead-Based Paint Abatement
    - Perform component removal of the interior wood windowsills within the living room and bedrooms throughout the structure.

- Lead-Based Paint Interim Controls
    - Perform lead-based paint stabilization for the exterior concrete foundation and exterior wood windowsills. The Contractor / Owner may elect to utilize other mitigation or abatement methods if preferred.
    - Perform lead-based paint stabilization on the exterior soffit, fascia, and upper-level trim. The Contractor / Owner may elect to utilize other mitigation or abatement methods if preferred. It should also be noted that the paint is currently “assumed” to be lead-based paint, and the Owner may elect to test the paint to determine the presence or absence of lead-based paint prior to mitigation / abatement activities.
    - Following stabilization, surfaces shall be primed and painted with non-lead containing coatings.

- Monitoring
    - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection. The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have been HEPA vacuumed and wet wiped and are free of visible dust and debris at the

completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS
Lake Forest College – 241 Washington Road

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work

This Specification covers the following:

- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance

All lead-based paint hazard control work must comply with the following:

- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- EPA Renovation, Repair, and Painting (RRP) Rule (40 CFR Part 745).
- Occupational Safety and Health Administration (OSHA) regulations for worker safety (29 CFR 1926.62).
- Resource Conservation and Recovery Act (RCRA) guidelines for managing hazardous waste (40 CFR Part 261).
- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods

Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

- Wet scrape loose, chipping, or peeling paint to a well adhered surface.
- Wet sanding or power sanding with HEPA-filtered tools.
- Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

- **Component Replacement**
  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
    - Ensure proper disposal of lead-painted components according to local and federal regulations.
  - **Applications:** Ideal for components in poor condition or those exposed to high levels of friction or impact.

- **Soil Abatement**
  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
    - **Soil removal:** Excavate and remove lead-contaminated soil and replace it with clean fill or landscaping material.
    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

  - Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
  - Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
  - Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
  - Conduct thorough wet cleaning and HEPA vacuuming post-completion.
  - Remove all generated dust/debris throughout the work area and containerize for disposal.
  - Dry sweeping or other methods that may result in the generation and migration of potentially contaminated dust shall prohibited at all times.
- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

6) Waste Disposal

- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
- Dispose of concentrated lead wastes separately from architectural components.
- Subject concentrated wastes to TCLP test to determine waste classification.
- Prepare a waste shipment record, to be signed by the generator, shipper, and disposal site.
- Architectural components, other items to which lead-based paint remains adhered, and cleaned plastic sheeting may be disposed of as common construction and demolition debris.

7) Worker Safety

- **Training and Certification:** All workers must be trained and certified in lead-safe work practices in compliance with EPA's RRP rule.
- **Personal Protective Equipment (PPE):** Workers must wear proper PPE, including respirators, gloves, disposable coveralls, and protective eyewear. Contractor shall assure that no employee is exposed to lead at concentrations greater than the OSHA Permissible Exposure Limit (PEL) of 50 ug/m^3.
- **Decontamination:** Decontamination procedures must be followed to prevent the spread of lead dust, including removing and disposing of contaminated PPE before leaving the worksite. Hand washing stations shall be present at the work site.

8) Occupant Protection

- **Notification:** Occupants must be informed about the nature and timeline of the lead hazard control work.
- **Relocation:** Temporary relocation of residents, particularly children and pregnant women, may be required during high-risk abatement activities.

- **Worksite Containment:** Work areas must be contained to prevent the spread of lead dust or debris into living areas, using plastic sheeting, temporary barriers, and warning signs.

9) Clearance Testing

Post-abatement and interim control clearance testing is required to ensure lead hazards have been sufficiently mitigated.

- **Testing Protocol:** A certified lead inspector or risk assessor must collect dust wipe samples for all interior work areas from floors, window sills, and other horizontal surfaces. Additionally, soil samples shall be collected for all exterior work areas where bare soil is present.
- **Standards:** Clearance levels must meet HUD and EPA requirements:
    - Floors: less than 10 µg/ft².
    - Window sills: less than 100 µg/ft².
    - Window wells: less than 400 µg/ft².
    - Soil:
        - Play areas: less than 400 ppm of lead.
        - Non-play areas: less than 1,200 ppm of lead.
- **Retesting:** If clearance fails, re-cleaning and retesting must be performed until the clearance criteria are met.

10) Record Keeping and Documentation

- Contractors must keep detailed records of all interim control and abatement activities, including methods used, dates of work, personnel involved, and results of clearance testing.
- Property owners must retain documentation of lead-based paint hazard control for future reference, particularly for real estate transactions or tenant disclosure.

11) Warranty and Follow-Up

- **Interim Controls:** Require annual inspections and maintenance to ensure continued effectiveness.
- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

12) Final Inspection

A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Lead Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

APPENDIX A

Licenses and Accreditations

EH0190951

Illinois Department of PUBLIC HEALTH

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

DIVISION OF ENVIRONMENTAL HEALTH
LEAD PROGRAM

Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

Enviroplus, Inc

LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

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TRUE NORTH
CONSULTANTS

LEAD-BASED PAINT MITIGATION / ABATEMENT PROTOCOL

Single-Family Residential Structure
329 & 331 Washington Road
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
Lake Forest, Illinois 60045

Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

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SECTION 1

WORK PLAN

WORK PLAN
Lake Forest College – 329 &331 Washington Road

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (contractor) at the single-family residential structure located at 329 & 331 Washington Road in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was identified on the exterior of the structure. The following is a summary of identified lead-based paint locations and observations:

- Units 329 & 331 Interior:
    - LBP was not identified within the interior of both units.
- Units 329 & 331 Exterior:
    - LBP was identified on the front/main door panels (west side). The paint was in good/intact condition
- The following components were inaccessible and unable to be tested at the time of the Inspection, and are assumed to contain lead-based paint:
    - Exterior soffit (wood, beige, poor condition).
    - Exterior fascia (wood, brown, poor condition).
    - Exterior upper-level window trim (west side) (metal & wood, brown, poor condition).

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

    - Lead-Based Paint Abatement
        - Perform component removal of the front/main entry door panels (west side).

- Lead-Based Paint Interim Controls
    - Perform lead-based paint stabilization for the exterior soffit, fascia, and upper-level widow trim. The Contractor / Owner may elect to utilize other mitigation or abatement methods if preferred. It should also be noted that the paint is currently “assumed” to be lead-based paint, and the Owner may elect to test the paint to determine the presence or absence of lead-based paint prior to mitigation / abatement activities.
    - Following stabilization, surfaces shall be primed and painted with non-lead containing coatings.

- Monitoring
    - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection. The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have been HEPA vacuumed and wet wiped and are free of visible dust and debris at the completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS
Lake Forest College – 329 & 331 Washington Road

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work

This Specification covers the following:

- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance

All lead-based paint hazard control work must comply with the following:

- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- EPA Renovation, Repair, and Painting (RRP) Rule (40 CFR Part 745).
- Occupational Safety and Health Administration (OSHA) regulations for worker safety (29 CFR 1926.62).
- Resource Conservation and Recovery Act (RCRA) guidelines for managing hazardous waste (40 CFR Part 261).
- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods

Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

- Wet scrape loose, chipping, or peeling paint to a well adhered surface.
- Wet sanding or power sanding with HEPA-filtered tools.
- Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

- **Component Replacement**
  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
    - Ensure proper disposal of lead-painted components according to local and federal regulations.
  - **Applications:** Ideal for components in poor condition or those exposed to high levels of friction or impact.

- **Soil Abatement**
  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
    - **Soil removal:** Excavate and remove lead-contaminated soil and replace it with clean fill or landscaping material.
    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

  - Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
  - Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
  - Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
  - Conduct thorough wet cleaning and HEPA vacuuming post-completion.
  - Remove all generated dust/debris throughout the work area and containerize for disposal.
  - Dry sweeping or other methods that may result in the generation and migration of potentially contaminated dust shall prohibited at all times.
- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

6) Waste Disposal

- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
- Dispose of concentrated lead wastes separately from architectural components.
- Subject concentrated wastes to TCLP test to determine waste classification.
- Prepare a waste shipment record, to be signed by the generator, shipper, and disposal site.
- Architectural components, other items to which lead-based paint remains adhered, and cleaned plastic sheeting may be disposed of as common construction and demolition debris.

7) Worker Safety

- **Training and Certification:** All workers must be trained and certified in lead-safe work practices in compliance with EPA's RRP rule.
- **Personal Protective Equipment (PPE):** Workers must wear proper PPE, including respirators, gloves, disposable coveralls, and protective eyewear. Contractor shall assure that no employee is exposed to lead at concentrations greater than the OSHA Permissible Exposure Limit (PEL) of 50 ug/m^3.
- **Decontamination:** Decontamination procedures must be followed to prevent the spread of lead dust, including removing and disposing of contaminated PPE before leaving the worksite. Hand washing stations shall be present at the work site.

8) Occupant Protection

- **Notification:** Occupants must be informed about the nature and timeline of the lead hazard control work.
- **Relocation:** Temporary relocation of residents, particularly children and pregnant women, may be required during high-risk abatement activities.

- **Worksite Containment:** Work areas must be contained to prevent the spread of lead dust or debris into living areas, using plastic sheeting, temporary barriers, and warning signs.

9) Clearance Testing

Post-abatement and interim control clearance testing is required to ensure lead hazards have been sufficiently mitigated.

- **Testing Protocol:** A certified lead inspector or risk assessor must collect dust wipe samples for all interior work areas from floors, window sills, and other horizontal surfaces. Additionally, soil samples shall be collected for all exterior work areas where bare soil is present.
- **Standards:** Clearance levels must meet HUD and EPA requirements:
    - Floors: less than 10 µg/ft².
    - Window sills: less than 100 µg/ft².
    - Window wells: less than 400 µg/ft².
    - Soil:
        - Play areas: less than 400 ppm of lead.
        - Non-play areas: less than 1,200 ppm of lead.
- **Retesting:** If clearance fails, re-cleaning and retesting must be performed until the clearance criteria are met.

10) Record Keeping and Documentation

- Contractors must keep detailed records of all interim control and abatement activities, including methods used, dates of work, personnel involved, and results of clearance testing.
- Property owners must retain documentation of lead-based paint hazard control for future reference, particularly for real estate transactions or tenant disclosure.

11) Warranty and Follow-Up

- **Interim Controls:** Require annual inspections and maintenance to ensure continued effectiveness.
- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

12) Final Inspection

A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Lead Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

APPENDIX A

Licenses and Accreditations

EH0190951

Illinois Department of PUBLIC HEALTH

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

DIVISION OF ENVIRONMENTAL HEALTH
LEAD PROGRAM

Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

Enviroplus, Inc

LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

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Single-Family Residential Structure
339 & 341 Washington Road
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
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Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

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SECTION 1

WORK PLAN

WORK PLAN
Lake Forest College – 339 & 341 Washington Road

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (Contractor) at the single-family residential structure located at 339 & 341 Washington Road in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was not identified on the exterior or interior of the structure. However, the following is a summary of findings and observations of assumed lead-based paint containing components:

- The following components were inaccessible and unable to be tested at the time of the Inspection, and are assumed to contain lead-based paint:
    - Exterior soffit (wood, beige, poor condition).
    - Exterior fascia (wood, brown, poor condition).
    - Exterior upper-level window trim (west side) (metal, brown, poor condition).
    - Exterior upper-level window trim (west side) (wood, brown, poor condition).

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

    - Lead-Based Paint Interim Controls
        - Perform lead-based paint stabilization for the exterior soffit, fascia, and upper-level window trim (west side). The Contractor / Owner may elect to utilize other mitigation or abatement methods if preferred. It should also be noted that the paint is currently “assumed” to be lead-based paint, and the Owner may elect to test the paint to determine the presence or absence of lead-based paint prior to mitigation / abatement activities.
        - Following stabilization, surfaces shall be primed and painted with non-lead containing coatings.

- Monitoring
    - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection. The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have been HEPA vacuumed and wet wiped and are free of visible dust and debris at the completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS

Lake Forest College – 339 & 341 Washington Road Campus Circle

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work

This Specification covers the following:

- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance

All lead-based paint hazard control work must comply with the following:

- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- EPA Renovation, Repair, and Painting (RRP) Rule (40 CFR Part 745).
- Occupational Safety and Health Administration (OSHA) regulations for worker safety (29 CFR 1926.62).
- Resource Conservation and Recovery Act (RCRA) guidelines for managing hazardous waste (40 CFR Part 261).
- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods

Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

- Wet scrape loose, chipping, or peeling paint to a well adhered surface.
- Wet sanding or power sanding with HEPA-filtered tools.
- Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

- **Component Replacement**
  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
    - Ensure proper disposal of lead-painted components according to local and federal regulations.
  - **Applications:** Ideal for components in poor condition or those exposed to high levels of friction or impact.

- **Soil Abatement**
  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
    - **Soil removal:** Excavate and remove lead-contaminated soil and replace it with clean fill or landscaping material.
    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

  - Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
  - Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
  - Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
  - Conduct thorough wet cleaning and HEPA vacuuming post-completion.
  - Remove all generated dust/debris throughout the work area and containerize for disposal.
  - Dry sweeping or other methods that may result in the generation and migration of potentially contaminated dust shall prohibited at all times.
- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

6) Waste Disposal

- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
- Dispose of concentrated lead wastes separately from architectural components.
- Subject concentrated wastes to TCLP test to determine waste classification.
- Prepare a waste shipment record, to be signed by the generator, shipper, and disposal site.
- Architectural components, other items to which lead-based paint remains adhered, and cleaned plastic sheeting may be disposed of as common construction and demolition debris.

7) Worker Safety

- **Training and Certification:** All workers must be trained and certified in lead-safe work practices in compliance with EPA's RRP rule.
- **Personal Protective Equipment (PPE):** Workers must wear proper PPE, including respirators, gloves, disposable coveralls, and protective eyewear. Contractor shall assure that no employee is exposed to lead at concentrations greater than the OSHA Permissible Exposure Limit (PEL) of 50 ug/m^3.
- **Decontamination:** Decontamination procedures must be followed to prevent the spread of lead dust, including removing and disposing of contaminated PPE before leaving the worksite. Hand washing stations shall be present at the work site.

8) Occupant Protection

- **Notification:** Occupants must be informed about the nature and timeline of the lead hazard control work.
- **Relocation:** Temporary relocation of residents, particularly children and pregnant women, may be required during high-risk abatement activities.

- **Worksite Containment:** Work areas must be contained to prevent the spread of lead dust or debris into living areas, using plastic sheeting, temporary barriers, and warning signs.

9) Clearance Testing

Post-abatement and interim control clearance testing is required to ensure lead hazards have been sufficiently mitigated.

- **Testing Protocol:** A certified lead inspector or risk assessor must collect dust wipe samples for all interior work areas from floors, window sills, and other horizontal surfaces. Additionally, soil samples shall be collected for all exterior work areas where bare soil is present.
- **Standards:** Clearance levels must meet HUD and EPA requirements:
    - Floors: less than 10 µg/ft².
    - Window sills: less than 100 µg/ft².
    - Window wells: less than 400 µg/ft².
    - Soil:
        - Play areas: less than 400 ppm of lead.
        - Non-play areas: less than 1,200 ppm of lead.
- **Retesting:** If clearance fails, re-cleaning and retesting must be performed until the clearance criteria are met.

10) Record Keeping and Documentation

- Contractors must keep detailed records of all interim control and abatement activities, including methods used, dates of work, personnel involved, and results of clearance testing.
- Property owners must retain documentation of lead-based paint hazard control for future reference, particularly for real estate transactions or tenant disclosure.

11) Warranty and Follow-Up

- **Interim Controls:** Require annual inspections and maintenance to ensure continued effectiveness.
- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

12) Final Inspection

A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Lead Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

APPENDIX A

Licenses and Accreditations

EH0190951

Illinois Department of PUBLIC HEALTH

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

DIVISION OF ENVIRONMENTAL HEALTH
LEAD PROGRAM

Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

Enviroplus, Inc

LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

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TRUE NORTH CONSULTANTS

LEAD-BASED PAINT MITIGATION / ABATEMENT PROTOCOL

Single-Family Residential Structure
674 E. Illinois Road
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
Lake Forest, Illinois 60045

Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

Table of Contents

SECTION 1
WORK PLAN

WORK PLAN
Lake Forest College – 674 E. Illinois Road

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (Contractor) at the single-family residential structure located at 674 E. Illinois Road in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was identified on the interior and exterior of the structure. The following is a summary of identified lead-based paint locations and observations:

- Interior:
    - LBP was identified on the basement wood door panel (south door). The paint is in poor condition.
    - LBP was identified on the original wood siding within the enclosed porch. The paint is in good/intact condition.
- Exterior:
    - LBP was identified on the original exterior wood window frames (cases and sills for all, including sash for front bay window) for the majority of the structure. The paint is in poor condition.
    - LBP was identified on the fascia. However, it appears the original wood fascia that contains the LBP is enclosed by newer metal casing.

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

    - Lead-Based Paint Abatement
        - Perform component removal of the basement wood door panel (south door).
        - Perform component removal of the front bay window sash.

- Lead-Based Paint Interim Controls
    - Perform lead-based paint stabilization on the original exterior wood window frames (cases and sills for all). The Contractor / Owner may elect to utilize other mitigation or abatement methods if preferred.
    - Following stabilization, surfaces shall be primed and painted with non-lead containing coatings.

- Monitoring
    - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection. The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.
    - Contractor shall verify that the metal door casing of the west side door is encasing the old wood frames and no friction is taking place on the old frames.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have been HEPA vacuumed and wet wiped and are free of visible dust and debris at the completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS
Lake Forest College – 674 E. Illinois Road

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work
This Specification covers the following:
- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance
All lead-based paint hazard control work must comply with the following:
- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- EPA Renovation, Repair, and Painting (RRP) Rule (40 CFR Part 745).
- Occupational Safety and Health Administration (OSHA) regulations for worker safety (29 CFR 1926.62).
- Resource Conservation and Recovery Act (RCRA) guidelines for managing hazardous waste (40 CFR Part 261).
- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods
Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

- Wet scrape loose, chipping, or peeling paint to a well adhered surface.
- Wet sanding or power sanding with HEPA-filtered tools.
- Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

- **Component Replacement**
  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
    - Ensure proper disposal of lead-painted components according to local and federal regulations.
  - **Applications:** Ideal for components in poor condition or those exposed to high levels of friction or impact.

- **Soil Abatement**
  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
    - **Soil removal:** Excavate and remove lead-contaminated soil and replace it with clean fill or landscaping material.
    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

  - Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
  - Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
  - Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
  - Conduct thorough wet cleaning and HEPA vacuuming post-completion.
  - Remove all generated dust/debris throughout the work area and containerize for disposal.
  - Dry sweeping or other methods that may result in the generation and migration of potentially contaminated dust shall prohibited at all times.
- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

6) Waste Disposal

- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
- Dispose of concentrated lead wastes separately from architectural components.
- Subject concentrated wastes to TCLP test to determine waste classification.
- Prepare a waste shipment record, to be signed by the generator, shipper, and disposal site.
- Architectural components, other items to which lead-based paint remains adhered, and cleaned plastic sheeting may be disposed of as common construction and demolition debris.

7) Worker Safety

- **Training and Certification:** All workers must be trained and certified in lead-safe work practices in compliance with EPA's RRP rule.
- **Personal Protective Equipment (PPE):** Workers must wear proper PPE, including respirators, gloves, disposable coveralls, and protective eyewear. Contractor shall assure that no employee is exposed to lead at concentrations greater than the OSHA Permissible Exposure Limit (PEL) of 50 ug/m^3.
- **Decontamination:** Decontamination procedures must be followed to prevent the spread of lead dust, including removing and disposing of contaminated PPE before leaving the worksite. Hand washing stations shall be present at the work site.

8) Occupant Protection

- **Notification:** Occupants must be informed about the nature and timeline of the lead hazard control work.
- **Relocation:** Temporary relocation of residents, particularly children and pregnant women, may be required during high-risk abatement activities.

- **Worksite Containment:** Work areas must be contained to prevent the spread of lead dust or debris into living areas, using plastic sheeting, temporary barriers, and warning signs.

9) Clearance Testing

Post-abatement and interim control clearance testing is required to ensure lead hazards have been sufficiently mitigated.

- **Testing Protocol:** A certified lead inspector or risk assessor must collect dust wipe samples for all interior work areas from floors, window sills, and other horizontal surfaces. Additionally, soil samples shall be collected for all exterior work areas where bare soil is present.
- **Standards:** Clearance levels must meet HUD and EPA requirements:
    - Floors: less than 10 µg/ft².
    - Window sills: less than 100 µg/ft².
    - Window wells: less than 400 µg/ft².
    - Soil:
        - Play areas: less than 400 ppm of lead.
        - Non-play areas: less than 1,200 ppm of lead.
- **Retesting:** If clearance fails, re-cleaning and retesting must be performed until the clearance criteria are met.

10) Record Keeping and Documentation

- Contractors must keep detailed records of all interim control and abatement activities, including methods used, dates of work, personnel involved, and results of clearance testing.
- Property owners must retain documentation of lead-based paint hazard control for future reference, particularly for real estate transactions or tenant disclosure.

11) Warranty and Follow-Up

- **Interim Controls:** Require annual inspections and maintenance to ensure continued effectiveness.
- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

12) Final Inspection

A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Lead Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

APPENDIX A

Licenses and Accreditations

EH0190951

Illinois Department of PUBLIC HEALTH

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

DIVISION OF ENVIRONMENTAL HEALTH
LEAD PROGRAM

Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

Enviroplus, Inc

LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

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TRUE NORTH
CONSULTANTS

LEAD-BASED PAINT MITIGATION / ABATEMENT PROTOCOL

Single-Family Residential Structure
676 & 678 Cherry Avenue
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
Lake Forest, Illinois 60045

Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

Table of Contents

SECTION 1

WORK PLAN

WORK PLAN
Lake Forest College – 676 & 678 Cherry Avenue

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (Contractor) at the single-family residential structure located at 676 & 678 Cherry Avenue in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was not identified on the exterior or interior of the structure. However, the following is a summary of findings and observations of assumed lead-based paint containing components:

- The following components were inaccessible and unable to be tested at the time of the Inspection, and are assumed to contain lead-based paint:
    - Exterior upper-level trim (metal, white, good/intact condition).
    - Gutters (metal, white, good/intact condition).

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

    - Lead-Based Paint Interim Controls
        - Perform lead-based paint stabilization for the exterior upper-level trim and gutters. The Contractor / Owner may elect to utilize other mitigation or abatement methods if preferred. It should also be noted that the paint is currently “assumed” to be lead-based paint, and the Owner may elect to test the paint to determine the presence or absence of lead-based paint prior to mitigation / abatement activities.
        - Following stabilization, surfaces shall be primed and painted with non-lead containing coatings.

    - Monitoring
        - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection.

The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have been HEPA vacuumed and wet wiped and are free of visible dust and debris at the completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS
Lake Forest College – 676 & 678 Cherry Avenue

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work

This Specification covers the following:

- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance

All lead-based paint hazard control work must comply with the following:

- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- EPA Renovation, Repair, and Painting (RRP) Rule (40 CFR Part 745).
- Occupational Safety and Health Administration (OSHA) regulations for worker safety (29 CFR 1926.62).
- Resource Conservation and Recovery Act (RCRA) guidelines for managing hazardous waste (40 CFR Part 261).
- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods

Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

- Wet scrape loose, chipping, or peeling paint to a well adhered surface.
- Wet sanding or power sanding with HEPA-filtered tools.
- Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

- **Component Replacement**
  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
    - Ensure proper disposal of lead-painted components according to local and federal regulations.
  - **Applications:** Ideal for components in poor condition or those exposed to high levels of friction or impact.

- **Soil Abatement**
  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
    - **Soil removal:** Excavate and remove lead-contaminated soil and replace it with clean fill or landscaping material.
    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

  - Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
  - Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
  - Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
  - Conduct thorough wet cleaning and HEPA vacuuming post-completion.
  - Remove all generated dust/debris throughout the work area and containerize for disposal.
  - Dry sweeping or other methods that may result in the generation and migration of potentially contaminated dust shall prohibited at all times.
- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

6) Waste Disposal

- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
- Dispose of concentrated lead wastes separately from architectural components.
- Subject concentrated wastes to TCLP test to determine waste classification.
- Prepare a waste shipment record, to be signed by the generator, shipper, and disposal site.
- Architectural components, other items to which lead-based paint remains adhered, and cleaned plastic sheeting may be disposed of as common construction and demolition debris.

7) Worker Safety

- **Training and Certification:** All workers must be trained and certified in lead-safe work practices in compliance with EPA's RRP rule.
- **Personal Protective Equipment (PPE):** Workers must wear proper PPE, including respirators, gloves, disposable coveralls, and protective eyewear. Contractor shall assure that no employee is exposed to lead at concentrations greater than the OSHA Permissible Exposure Limit (PEL) of 50 ug/m^3.
- **Decontamination:** Decontamination procedures must be followed to prevent the spread of lead dust, including removing and disposing of contaminated PPE before leaving the worksite. Hand washing stations shall be present at the work site.

8) Occupant Protection

- **Notification:** Occupants must be informed about the nature and timeline of the lead hazard control work.
- **Relocation:** Temporary relocation of residents, particularly children and pregnant women, may be required during high-risk abatement activities.

- **Worksite Containment:** Work areas must be contained to prevent the spread of lead dust or debris into living areas, using plastic sheeting, temporary barriers, and warning signs.

9) Clearance Testing

Post-abatement and interim control clearance testing is required to ensure lead hazards have been sufficiently mitigated.

- **Testing Protocol:** A certified lead inspector or risk assessor must collect dust wipe samples for all interior work areas from floors, window sills, and other horizontal surfaces. Additionally, soil samples shall be collected for all exterior work areas where bare soil is present.
- **Standards:** Clearance levels must meet HUD and EPA requirements:
    - Floors: less than 10 µg/ft².
    - Window sills: less than 100 µg/ft².
    - Window wells: less than 400 µg/ft².
    - Soil:
        - Play areas: less than 400 ppm of lead.
        - Non-play areas: less than 1,200 ppm of lead.
- **Retesting:** If clearance fails, re-cleaning and retesting must be performed until the clearance criteria are met.

10) Record Keeping and Documentation

- Contractors must keep detailed records of all interim control and abatement activities, including methods used, dates of work, personnel involved, and results of clearance testing.
- Property owners must retain documentation of lead-based paint hazard control for future reference, particularly for real estate transactions or tenant disclosure.

11) Warranty and Follow-Up

- **Interim Controls:** Require annual inspections and maintenance to ensure continued effectiveness.
- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

12) Final Inspection

A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Lead Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

APPENDIX A

Licenses and Accreditations

EH0190951

Illinois Department of PUBLIC HEALTH

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

DIVISION OF ENVIRONMENTAL HEALTH
LEAD PROGRAM

Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

Enviroplus, Inc

LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

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TRUE NORTH
CONSULTANTS

LEAD-BASED PAINT MITIGATION / ABATEMENT PROTOCOL

Single-Family Residential Structure
680 & 682 Cherry Avenue
Lake Forest, Illinois 60045

Prepared for:

Lake Forest College
555 N. Sheridan Road
Lake Forest, Illinois 60045

Prepared by:

True North Consultants, Inc.
1000 E. Warrenville Road, Ste. 140
Naperville, IL 60564

Phone: 630.717.2880

Date: December 6, 2024

Project Number: T243758

Table of Contents

SECTION 1
WORK PLAN

WORK PLAN
Lake Forest College – 680 & 682 Cherry Avenue

True North Consultants, Inc. (True North) was retained by Lake Forest College (Client / Owner) to develop the following Work Plan for lead-based paint mitigation / abatement activities to be performed by Enviroplus (Contractor) at the single-family residential structure located at 680 & 682 Cherry Avenue in Lake Forest, Illinois (Site). The scope of mitigation / abatement activities has been determined based upon the findings of the Lead-Based Paint Inspection Report (dated June 9, 2023) developed by True North.

Based upon the findings of the Lead-Based Paint Inspection Report, lead-based paint was not identified on the exterior or interior of the structure. However, the following is a summary of findings and observations of assumed lead-based paint containing components:

- The following components were inaccessible and unable to be tested at the time of the Inspection, and are assumed to contain lead-based paint:
    - Exterior upper-level trim (metal, white, good/intact condition).
    - Gutters (metal, white, good/intact condition).

Based upon these findings, the scope of mitigation / abatement activities shall include the following:

1. Retain an Illinois Department of Public Health (IDPH) Lead Abatement Contractor (Contractor) and/or Renovation, Repair, and Painting Program (RRP) certified renovator to perform lead-based paint mitigation / abatement activities in accordance with the Specifications provided, and all applicable federal, state, and local regulations as detailed below:

    - Lead-Based Paint Interim Controls
        - Perform lead-based paint stabilization for the exterior upper-level trim and gutters. The Contractor / Owner may elect to utilize other mitigation or abatement methods if preferred. It should also be noted that the paint is currently “assumed” to be lead-based paint, and the Owner may elect to test the paint to determine the presence or absence of lead-based paint prior to mitigation / abatement activities.
        - Following stabilization, surfaces shall be primed and painted with non-lead containing coatings.

    - Monitoring
        - The scope of mitigation / abatement activities has been developed based upon the observations / conditions of lead-based paint at the time of the Inspection.

The Contractor shall reassess areas of lead-based paint previously determined to be in good condition. If conditions of lead-based paint at the Site have since deteriorated, the Contractor shall proactively mitigate or abate any potential lead hazards. In addition, the Contractor shall assess previously encapsulated areas with lead-based paint to ensure the encapsulation is maintained. In the event encapsulation is no longer adequate, proactive measures shall be taken to eliminate any potential lead-based paint hazards.

2. The Contractor shall ensure that all areas adjacent to lead mitigation / abatement areas are adequately protected for the duration of work activities in accordance with applicable regulatory requirements.

3. The Contractor shall assume that any dust and debris present prior to or generated during the mitigation / abatement activities is contaminated with lead and shall adequately protect and clean areas of contamination as necessary.

4. The Contractor shall ensure that surfaces within the work area and surfaces outside of the work area where visible debris is present as a result of Contractor work activities have been HEPA vacuumed and wet wiped and are free of visible dust and debris at the completion of abatement.

5. At the completion of lead mitigation / abatement activities, clearance wipe sampling shall be performed for each interior work area. The Contractor shall ensure that lead concentrations within each interior work area meet existing EPA/HUD clearance criteria prior to the removal of work barriers and engineering controls.

6. Air monitoring may be performed during mitigation / abatement activities at the discretion of the Owner to ensure concentrations of airborne lead remains below applicable Occupational Safety and Health Administration (OSHA) exposure limits outside mitigation / abatement areas.

SECTION 2

MITIGATION / ABATEMENT SPECIFICATIONS

MITIGATION / ABATEMENT SPECIFICATIONS
Lake Forest College – 680 & 682 Cherry Avenue

This Specification outlines the procedures and requirements for interim controls and abatement of lead-based paint hazards. The purpose is to mitigate the risk of lead exposure through temporary (interim) or permanent (abatement) measures, in compliance with regulations established by the United States Department of Housing and Urban Development (HUD) and the United States Environmental Protection Agency (EPA), as adopted by the Illinois Department of Public Health (IDPH).

1) Scope of Work

This Specification covers the following:

- Interim control methods for reducing lead exposure temporarily.
- Abatement methods for the permanent elimination of lead-based paint hazards.
- Work practices and engineering controls.
- Safety protocols for workers and occupants.
- Waste generation and disposal.
- Clearance and documentation requirements post-interim control and abatement activities.

2) Regulatory Compliance

All lead-based paint hazard control work must comply with the following:

- HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.
- EPA Renovation, Repair, and Painting (RRP) Rule (40 CFR Part 745).
- Occupational Safety and Health Administration (OSHA) regulations for worker safety (29 CFR 1926.62).
- Resource Conservation and Recovery Act (RCRA) guidelines for managing hazardous waste (40 CFR Part 261).
- A 7-Day Notice of Commencement of Lead Abatement/Mitigation activities shall be submitted by the Contractor to IDPH.
- Local and state laws governing lead hazard control.

3) Interim Control Methods

Interim controls are temporary measures to reduce lead hazards. These are not permanent solutions and require ongoing maintenance. Interim controls for lead-based paint hazards should be inspected at least annually to ensure they remain effective in preventing exposure to lead hazards or after significant events that might affect their effectiveness, such as renovations, repairs, or weather events.

- **Paint Stabilization**
  - **Objective:** Temporarily reduce lead hazards on deteriorated paint surfaces.
  - **Methods:**

- Wet scrape loose, chipping, or peeling paint to a well adhered surface.
- Wet sanding or power sanding with HEPA-filtered tools.
- Prime and repaint with a lead-free paint product.

- **Friction and Impact Surface Treatment**
  - **Objective:** Address lead hazards on surfaces prone to friction or impact, such as windows and doors.
  - **Methods:**
    - Lubricate or adjust windows and doors to prevent abrasion.
    - Apply durable cladding (e.g., vinyl, metal) to impacted surfaces.
    - Replace or modify moving parts to eliminate friction on painted surfaces.

- **Encapsulation**
  - **Objective:** Temporarily seal lead-based paint surfaces.
  - **Methods:**
    - Apply a durable, HUD-approved encapsulant material to cover intact lead-based paint.
    - Ensure surface preparation (cleaning, minor repairs) before applying the encapsulant.

4) Abatement Methods

Abatement methods are designed to permanently eliminate lead-based paint hazards.

- **Paint Removal**
  - **Objective:** Permanently eliminate lead paint hazards by removing lead-based paint from surfaces.
  - **Methods:**
    - **Chemical stripping:** Use EPA-approved chemicals to dissolve and scrape lead-based paint.
    - **Abrasive removal:** Sanding or blasting with HEPA-controlled tools.
    - **Heat gun:** Remove paint with a heat gun set below 1,100°F.
  - **Applications:** Appropriate for surfaces where lead paint deterioration or future disturbance is likely.

- **Encapsulation (Permanent)**
  - **Objective:** Provide a durable, long-lasting seal over lead-based paint.
  - **Methods:**
    - Apply a permanent encapsulant approved for long-term use over lead-based surfaces.
    - Surface preparation must ensure the integrity of the encapsulant.

- **Monitoring:** Encapsulated areas should be inspected periodically to ensure continued effectiveness.

- **Enclosure**
  - **Objective:** Cover lead-painted surfaces with a durable, lead-free material to permanently contain the hazard.
  - **Methods:**
    - Install materials such as drywall, paneling, or cladding over the lead-painted surface.
    - Securely fasten and seal all materials to prevent future exposure to underlying lead paint.
  - **Applications:** Best for large areas like walls, ceilings, or trim where paint removal is impractical.

- **Component Replacement**
  - **Objective:** Permanently eliminate lead hazards by replacing components containing lead-based paint.
  - **Methods:**
    - Remove and replace lead-painted components, such as windows, doors, or trim, with new lead-free materials.
    - Ensure proper disposal of lead-painted components according to local and federal regulations.
  - **Applications:** Ideal for components in poor condition or those exposed to high levels of friction or impact.

- **Soil Abatement**
  - **Objective:** Address lead-contaminated soil hazards, especially around building exteriors and play areas.
  - **Methods:**
    - **Soil removal:** Excavate and remove lead-contaminated soil and replace it with clean fill or landscaping material.
    - **Soil capping:** Install a barrier such as sod, mulch, or pavement over contaminated soil.
  - **Applications:** Exterior areas with significant lead contamination from deteriorating exterior paint or other sources.

5) Dust Control and Cleaning

- **Objective:** Reduce lead dust exposure during and after work.
- **Methods:**
  - Use wet methods and HEPA-filtered vacuums during all work phases.

- Use HEPA-filtered air filtration devices for indoor mitigation / abatement activities as necessary.
- Secure and contain work areas with engineering barriers and protect surfaces with plastic sheeting.
- Conduct pre-cleaning of moveable objects and remove all moveable objects from the work area or cover all moveable objects with plastic sheeting.
- Conduct thorough wet cleaning and HEPA vacuuming post-completion.
- Remove all generated dust/debris throughout the work area and containerize for disposal.
- Dry sweeping or other methods that may result in the generation and migration of potentially contaminated dust shall prohibited at all times.

- **Clearance:** Ensure post-work clearance testing meets HUD standards for lead dust levels.

6) Waste Disposal

- All paint chips, lead dust, cleaning supplies, HEPA filters, vacuum contents and filters, disposable suits, and other concentrated lead-bearing waste shall be packed in at least two 6 mil plastic bags.
- Dispose of concentrated lead wastes separately from architectural components.
- Subject concentrated wastes to TCLP test to determine waste classification.
- Prepare a waste shipment record, to be signed by the generator, shipper, and disposal site.
- Architectural components, other items to which lead-based paint remains adhered, and cleaned plastic sheeting may be disposed of as common construction and demolition debris.

7) Worker Safety

- **Training and Certification:** All workers must be trained and certified in lead-safe work practices in compliance with EPA's RRP rule.
- **Personal Protective Equipment (PPE):** Workers must wear proper PPE, including respirators, gloves, disposable coveralls, and protective eyewear. Contractor shall assure that no employee is exposed to lead at concentrations greater than the OSHA Permissible Exposure Limit (PEL) of 50 ug/m^3.
- **Decontamination:** Decontamination procedures must be followed to prevent the spread of lead dust, including removing and disposing of contaminated PPE before leaving the worksite. Hand washing stations shall be present at the work site.

8) Occupant Protection

- **Notification:** Occupants must be informed about the nature and timeline of the lead hazard control work.
- **Relocation:** Temporary relocation of residents, particularly children and pregnant women, may be required during high-risk abatement activities.

- **Worksite Containment:** Work areas must be contained to prevent the spread of lead dust or debris into living areas, using plastic sheeting, temporary barriers, and warning signs.

9) Clearance Testing

Post-abatement and interim control clearance testing is required to ensure lead hazards have been sufficiently mitigated.

- **Testing Protocol:** A certified lead inspector or risk assessor must collect dust wipe samples for all interior work areas from floors, window sills, and other horizontal surfaces. Additionally, soil samples shall be collected for all exterior work areas where bare soil is present.
- **Standards:** Clearance levels must meet HUD and EPA requirements:
    - Floors: less than 10 µg/ft².
    - Window sills: less than 100 µg/ft².
    - Window wells: less than 400 µg/ft².
    - Soil:
        - Play areas: less than 400 ppm of lead.
        - Non-play areas: less than 1,200 ppm of lead.
- **Retesting:** If clearance fails, re-cleaning and retesting must be performed until the clearance criteria are met.

10) Record Keeping and Documentation

- Contractors must keep detailed records of all interim control and abatement activities, including methods used, dates of work, personnel involved, and results of clearance testing.
- Property owners must retain documentation of lead-based paint hazard control for future reference, particularly for real estate transactions or tenant disclosure.

11) Warranty and Follow-Up

- **Interim Controls:** Require annual inspections and maintenance to ensure continued effectiveness.
- **Abatement:** Provide a warranty for at least one year on all abatement work, with follow-up inspections to ensure the durability of controls such as encapsulation or enclosure.

12) Final Inspection

A final walkthrough and inspection shall be conducted with the Contractor, Owner, and Lead Inspector / Risk Assessor to verify compliance with HUD and EPA regulations before reoccupying the treated areas.

APPENDIX A

Licenses and Accreditations

EH0190951

Illinois Department of PUBLIC HEALTH

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

DIVISION OF ENVIRONMENTAL HEALTH
LEAD PROGRAM

Issued under the authority of the Illinois Department of Public Health

5/31/2025	5317	L-0024

Enviroplus, Inc

LEAD ABATEMENT
CONTRACTOR LICENSE

04/05/2024
Enviroplus, Inc

8044 Lawndale Ave
Skokie, IL 60076

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enviroplus, inc.
8044 LAWNDALE AVENUE
SKOKIE, IL 60076
(847) 475-0022 FAX (847) 475-0155
office@enviroplus-inc.com

Date: December 16, 2024

To: Lake Forest College
Attn: Mr. Philip C. Bryan - Director of Facilities Management
555 N. Sheridan Rd., Lake Forest, IL 60045

RE: Revised Proposal Costs - Lead Abatement & Disposal Services
Lake Forest College – Various Residential Units

Dear Mr. Bryan,

Per your request, Enviroplus has prepared the following revised budget proposal costs for the lead-based paint (LBP) remediation, abatement and disposal work identified in the True North Consultants Inc. (True North) REVISED Lead-Based Paint Mitigation/Abatement Protocols for the various residential units listed below. The True North REVISED Lead-Based Paint Protocols include the requested updates/additional tasks and additional units from EPA/HUD. All work shall be performed by an IDPH lead licensed contractor (Enviroplus, Inc.) and by IDPH lead licensed personnel. All LBP work will comply with HUD, EPA, OSHA, RCRA and Illinois Department of Public Health (IDPH) Guidelines for LBP in Housing. The scope of work shall include:

- IDPH 7-Day Notices of Commencement of Lead Abatement/Mitigation activities for all units
- All material and equipment (including lifts, as needed)
- LBP waste profiling, manifest and disposal at an EPA approved facility
- IDPH licensed and certified union lead abatement personnel
- LBP General Liability Insurance

Proposal Costs:

7 Campus Circle:	$4,850
8 Campus Circle:	$18,800
9 Campus Circle:	$14,900
10 Campus Circle:	$11,400
11 Campus Circle:	$41,500
12 Campus Circle:	$41,500
14 & 15 Campus Circle:	$16,850
16 & 17 Campus Circle:	$16,850
18 Campus Circle:	$4,850
19 Campus Circle:	$9,700
22 Campus Circle:	$9,300
24 & 25 South Campus Circle:	$11,500
28 & 29 South Campus Circle:	$11,500
241 Washington Road:	$18,700
329 & 331 Washington Road:	$15,850
339 & 341 Washington Road:	$13,900
674 Illinois Road:	$15,500
676 & 678 Cherry Avenue:	$16,800
680 & 682 Cherry Avenue:	$16,800

Should you have any questions, please give me a call at the office. Thank you.

Mr. Bob Garcia
Project Manager

Project 2 Work Plan:

Dormitory Window Replacement

Lake Forest will hire a lead-based paint certified firm operator to replace the existing windows in two of the three eligible dormitories: Roberts, McClure, and Gregory. At the conclusion of the work, Lake Forest will provide a photographic report documenting the completed scope. The work to replace the first dormitory window will start in June 2025 with an estimated competition date of mid-July 2025. The next dormitory windows will start in June 2026, with an estimated completion date of mid-July 2026.

The existing windows will be replaced with Kawneer Architectural Aluminum TR-9100 windows. These new windows incorporate enhanced thermal barriers that combat the transfer of heat from the exterior and interior environment through heat transfer: conduction, convection, and radiation. This Order contains a Kawneer windows specifications documents and a thermal technology brochure as attachments that provide more details about the windows and the energy efficiency enhancements.

Dorm Room Window Replacement Proposed Calendar

Dormitory Window Replacement Schedule:

Dormitory	Anticipated Start Date	Anticipated Completion Date
Dormitory One (anticipated Roberts Dormitory)	June 2, 2025	July 14, 2025
Dormitory Two (anticipated McClure Dormitory)	June 1, 2026	July 13, 2026

QUAD WINDOW REPLACEMENT

Vintage Construction Company
2307 Sunset Lane
Lindenhurst IL 60046
847-456-1591

Estimate

Number	E391
Date	12/12/2024

Bill To

Lake Forest College
555 N Sheridan Rd.
Lake Forest, IL, 60045

PO Number	Terms	Project
		Quad dorm window replacement

Description	Amount
Window replacement for Quad buildings.	
Includes removal of all windows in two wings plus first floor lounge areas.	
Install new Quaker Keystone K200 aluminum windows with C272 Low-E DSB. Color to be black. Units will be sized the same as existing and will need no modifications to existing openings.	
Price includes windows and related materials, delivery, removal of old windows and all debris from jobsite.	
Any damage to framing structure or trims revealed upon demolition will be an additional charge.	
PRICE IS PER BUILDING (101) window units per building.	$276,775.00

Total	$276,775.00

SECTION 085113: ALUMINUM WINDOWS

This suggested guide specification has been developed using the current edition of the Construction Specifications Institute (CSI) “Manual of Practice,” including the recommendations for the CSI three-part Section Format and the CSI Page Format. Additionally, the development concept and organizational arrangement of the American Institute of Architects (AIA) MasterSpec® Program has been recognized in the preparation of this guide specification. Neither CSI, AIA, USGBC, nor ILFI endorse specific manufacturers and products. The preparation of the guide specification assumes the use of standard contract documents and forms, including the “Conditions of the Contract,” published by the AIA.

EDITOR NOTE: Instructions to the editor appear in RED. This style does not exist in the standard CSI template.

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section covers Kawneer Architectural Aluminum Windows, including perimeter trims, stools, accessories, shims and anchors, and perimeter sealing of window units.

B. Types of Kawneer Architectural Aluminum Windows include:

EDITOR NOTE: Choose Window type based on project requirements. Delete Window types that do not apply to this project.

1. TR-9100 Windows:
   a. Single Hung Side Load Window
   b. Frame depth: 3-1/4" (82.5 mm)
   c. AW-PG40-H without reinforcement
   d. AW-PG50-H with steel reinforcement

C. Related Sections:

EDITOR NOTE: The sections listed below are specified elsewhere. However, Kawneer recommends single-source responsibility for all of these sections as described in the Quality Assurance article below.

1. 072700: Air Barriers
2. 079200: Joint Sealants
3. 083213: Sliding Aluminum-Framed Glass Doors
4. 084113: Aluminum-Framed Entrances and Storefronts
5. 084313: Aluminum-Framed Storefronts
6. 084329: Sliding Storefronts
7. 084413: Glazed Aluminum Curtain Walls
8. 084433: Sloped Glazing Assemblies

9. 086300: Metal-Framed Skylights

1.3 DEFINITIONS

A. For fenestration industry standard terminology and definitions, refer to the Fenestration & Glazing Industry Alliance (FGIA) Glossary (AAMA AG-13).

1.4 PERFORMANCE REQUIREMENTS

EDITOR NOTE: Provide wind load design pressures in PSF and include applicable building code and year edition.

A. General Performance:

1. Product to comply with the specified performance requirements without failure due to defective manufacture, fabrication, installation, or other defects in construction, as determined by testing of aluminum-framed window system representing those indicated for this project.

B. Performance Class and Grade:

1. AW-PG40 - 60" X 90" (1524 mm X 2515 mm) -H without reinforcement
2. AW-PG50 - 60" X 90" (1524 mm X 2515 mm) - H with steel reinforcement

C. Wind loads:

1. Provide window system; include anchorage, capable of withstanding wind load design pressures of (_____) lbs./sq. ft. inward and (_____) outward. The design pressures are based on the (_____) Building Code; (_____) Edition.

D. Air Leakage:

EDITOR NOTE: Performance results for air infiltration are based upon ASTM and AAMA standards. Consult your local Kawneer representative concerning specific project performance requirements.

1. The test specimen shall be tested in accordance with ASTM E 283.
2. Air infiltration rate shall not exceed 0.30 cfm/ft^2 at a static air pressure differential of 6.2 psf (300 Pa).

E. Water Resistance:

EDITOR NOTE: Performance results for water resistance are based upon ASTM and FGIA/AAMA standards. Consult your local Kawneer representative concerning specific project performance requirements.

1. The test specimen shall be tested in accordance with ASTM E 331.
2. AW-PG40-H without reinforcement; There shall be no leakage at a minimum static air pressure differential of 8 psf (383 Pa).
3. AW-PG50-H with steel reinforcement; There shall be no leakage at a minimum static air pressure differential of 10 psf (479 Pa).

F. Uniform Load Deflection:

1. There shall be no deflection more than L/175 when tested per ASTM E 330.
2. AW-PG40-H without reinforcement; When tested at a static air pressure difference of 40 psf (1920 Pa).

3. AW-PG50-H with steel reinforcement; When tested at a static air pressure difference of 50 psf (2400 Pa).

G. Uniform Load:

1. No glass breakage or permanent damage to fasteners, and maximum .2% permanent deformation of the span of any frame member when tested per ASTM E 330.
2. AW-PG40-H without reinforcement; When tested at a static air pressure difference of 60 psf (2880 Pa).
3. AW-PG50-H with steel reinforcement; When tested at a static air pressure difference of 75 psf (3600 Pa).

H. Component Testing:

1. Window components shall be tested in accordance with procedures described in AAMA/WDMA/CSA 101/I.S./AA440 (NAFS).

I. Thermal Test:

EDITOR NOTE: Values listed are based upon 1" Low E, Argon filled insulating glass. Other types may yield improved U-Factors and CFR.

1. Per AAMA 1503, at the prescribed 48" x 72" (1219 mm x 1829 mm) test size glazed with 1" insulating glass made with 1/8", argon gas, and 1/8" glass with low E coating (Hard Coat):
   a. Condensation Resistance factor: Minimum (56 frame) and (62 glass) CRF.
   b. Thermal Transmittance: Maximum 0.51 Btu/hr/ft^2/°F.

J. U-factor Simulation:

1. Per NFRC 100 at the prescribed 48" x 72" (1219 mm x 1829 mm) Non-Residential Size, glazed with 1" (25.4 mm) insulating glass made with 1/8", argon gas, 1/8" low E coating (Soft Coat).
2. Thermal transmittance (U-factor) shall not be more than 0.47 Btu/hr/ft^2/°F.

K. Sound Transmission Class (STC) and Outdoor-Indoor Transmission Class (OITC):

1. When tested to ASTM E90, the sound transmission shall not be less than STC 36 and OITC 31 with 1" insulating glass made with exterior 1/4" laminated glass - 1/8" glass x 0.060 PVB interlayer x 1/8" glass - and interior 3/16" clear glass.

L. Impact Resistance Performance:

EDITOR NOTE: Choose impact resistance performance if needed to meet project requirements.

1. The test specimen shall be tested in accordance with ASTM E 1886, information in ASTM E 1996 and TAS 201/203.
2. Large-Missile Impact: For aluminum-framed systems located within 30 feet (9.1 m) of grade.
3. Small-Missile Impact: For aluminum-framed systems located above 30 feet (9.1 m) of grade.

M. Blast Mitigation Performance:

EDITOR NOTE: Choose blast mitigation performance if required to meet project requirements.

1. The test specimen shall be tested or proven through analysis to meet ASTM F1642, GSA-TS01, and UFC 04-010.01 performance criteria.

2. To meet UFC 04-010.01, B-3.1 Standard 10 for Windows and Skylights, the following options are available:
    a. Section B-3.1.1 Dynamic analysis
    b. Section B-3.1.2 Testing
    c. Section B-3.1.3 ASTM F2248 Design Approach

N. Forced Entry:
1. All windows shall conform to ASTM F588, Grade 10.

O. Thermal Barrier Test:
1. Thermal break shall be designed in accordance with AAMA TIR-A8 and tested in accordance with AAMA 505.

1.5 SUBMITTALS

A. Product Data:
1. For each type of aluminum window indicated, include:
    a. Construction details
    b. Material descriptions
    c. Fabrication methods
    d. Dimensions of individual components and profiles
    e. Hardware
    f. Finishes
    g. Operating instructions
2. Recycled Content:

EDITOR NOTE: Include these Recycled Content specifications if needed to meet project requirements or for a project that includes Green Building Certifications such as LEED, Living Building Challenge (LBC), etc.

EDITOR NOTE: If Recycled Content requirements are not specified, prime (zero recycled content) aluminum could be supplied.

    a. Provide documentation that aluminum has a minimum of 40% mixed pre- and post-consumer recycled content.
    b. Provide a sample document illustrating project-specific information that will be provided after product shipment.
    c. After product has shipped, provide project-specific recycled content information:
        1) Indicate recycled content, including the percentage of pre- and post-consumer recycled content per unit of product.
        2) Indicate the relative dollar value of recycled content product to the total dollar value of product included in the project.
        3) Indicate the location for recovery of recycled content.
        4) Indicate the location of the manufacturing facility.
3. Environmental Product Declaration (EPD):
    a. Include a Type III Product-Specific EPD created from a Product Category Rule.

B. Shop Drawings:
   1. Plans
   2. Elevations
   3. Sections
   4. Details
   5. Hardware
   6. Attachments to other work
   7. Operational clearances
   8. Installation details

C. Samples for Initial Selection:
   1. Provide samples for units with factory-applied color finishes.
   2. Provide samples of hardware and accessories involving color selection.

D. Samples for Verification:
   1. Provide a verification sample for aluminum windows and required components.

E. Product Schedule:
   1. Provide a product schedule for aluminum windows. Use the same designations indicated on Drawings.

F. Product Test Reports:
   1. Provide test reports for each type, class, grade, and size of aluminum window used in the project. Test results based on use of downsized test units will not be accepted.
   2. Test reports must be based on evaluation of comprehensive tests performed by a qualified preconstruction testing agency.
   3. Test reports must indicate compliance with performance requirements.

1.6 QUALITY ASSURANCE

A. Installer Qualifications:
   1. Installer must have successfully installed the same or similar units required for the project and other projects of similar size and scope.

B. Manufacturer Qualifications:
   1. Manufacturer must be capable of fabricating aluminum windows that meet or exceed the stated performance requirements.
   2. Manufacturer must document this performance by the inclusion of test reports and calculations.

C. Source Limitations:
   1. Obtain aluminum windows through one source from a single manufacturer.

D. Product Options:

1. Drawings indicate size, profiles, and dimensional requirements of aluminum windows and are based on the specific system indicated. Refer to Division 01 Product Requirements Section. Do not modify size and dimensional requirements.
2. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.

E. Mockups:
1. Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
2. Build mockups for the type(s) of window(s) indicated, in location(s) shown on drawings.

F. Pre-installation Conference:
1. Conduct conference at project site to comply with requirements in Division 01 Project Management and Coordination Section.

1.7 PROJECT CONDITIONS

A. Field Measurements:
1. Verify aluminum window openings by field measurements before fabrication.
2. Indicate measurements on shop drawings.

1.8 WARRANTY

A. Submit manufacturer's standard warranty for owner's acceptance.

B. Warranty Period:
1. Windows: Warrant for two years against defects in material or workmanship under normal use.
2. Insulating glass units: Warrant seal for five years against visual obstruction from film formation or moisture collection between internal glass surfaces, excluding that caused by glass breakage or abuse.

EDITOR NOTE: Contact Kawneer for other time frames.

3. Paint finish: PPG...
a. Permafluor™ organic finish conforming to AAMA 2605: Warrant for ten years against chipping, peeling, cracking, chalking, or fading.

EDITOR NOTE: Include this item for an AAMA 2605 70% fluoropolymer paint finish. Delete this item if that finish is not applicable to your project.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Basis-of-Design Product:
1. Kawneer Company, Inc.
a. TR-9100 Single Hung Windows:
1) Single Hung Side Load Window
2) 3-1/4" (82.5 mm) frame depth

3) AW-PG40-H, without reinforcement
4) AW-PG50-H with steel reinforcement

B. Subject to compliance with requirements, provide a comparable product by the following:

EDITOR NOTE: Provide information below indicating approved alternatives to the basis-of-design product.

1. Manufacturer: (_____)
2. Series: (_____)
3. Profile Dimension: (_____)
4. Performance Grade: (_____)

C. Substitutions:
1. Refer to Division 01 Substitutions Section for procedures and submission requirements.
2. Pre-Contract (Bidding Period) Substitutions:
   a. Submit written requests ten (10) days prior to bid date.
3. Post-Contract (Construction Period) Substitutions:
   a. Submit written request in order to avoid installation and construction delays.
4. Product Literature and Drawings:
   a. Submit product literature and drawings modified to suit specific project requirements and job conditions.
5. Certificates:
   a. Submit certificate(s) certifying that the substitute manufacturer (1) attests to adherence to specification requirements for window system performance criteria, and (2) has been engaged in the design, manufacture, and fabrication of aluminum windows for a period of not less than ten (10) years. (*Company Name*)
6. Test Reports:
   a. Submit test reports verifying compliance with each test requirement required by the project.
7. Samples:
   a. Provide samples of typical product sections and finish samples in manufacturer's standard sizes.

D. Substitution Acceptance:
1. Acceptance will be in written form, either as an addendum or modification.
2. Acceptance will be documented by a formal change order signed by the owner and contractor.

2.2 MATERIALS

A. Aluminum Extrusions:
1. Alloy and temper recommended by aluminum window manufacturer for strength, corrosion resistance, and application of required finish.
2. Not less than 0.062" (1.57 mm) wall thickness at any location for the main frame and sash members.
3. Recycled Content:

EDITOR NOTE: Include these Recycled Content specifications if needed to meet project requirements or for a project that includes Green Building Certifications such as LEED, Living Building Challenge (LBC), etc.

EDITOR NOTE: If Recycled Content requirements are not specified, prime (zero recycled content) aluminum could be supplied.

a. Shall have a minimum of 40% mixed pre- and post-consumer recycled content.
b. Indicate recycled content, including the percentage of pre- and post-consumer recycled content per unit of product.
c. Indicate the relative dollar value of recycled content product to the total dollar value of product included in the project.
d. Indicate the location for recovery of recycled content.
e. Indicate the location of the manufacturing facility.

B. Fasteners:
1. Nonmagnetic stainless steel or other materials must be non-corrosive and compatible with aluminum members, trim hardware, anchors, and other components.

C. Anchors, Clips, and Accessories:
1. Aluminum, nonmagnetic stainless steel, or zinc-coated steel or iron complying with ASTM B 633 for SC 3 severe service conditions or other suitable zinc coating.
2. Anchors, clips, and accessories shall provide sufficient strength to withstand the design pressure indicated.

D. Reinforcing Members:
1. Aluminum, nonmagnetic stainless steel, or nickel/chrome-plated steel complying with ASTM B 456 for Type SC 3 severe service conditions, or zinc-coated steel or iron complying with ASTM B 633 for SC 3 severe service conditions or other suitable zinc coating.
2. Reinforcing members must provide sufficient strength to withstand the design pressure indicated.

E. Thermal Barrier:
1. The thermal barrier shall consist of integral structural polyurethane thermal break installed by the window manufacturer in the frame members.

2.3 WINDOW SYSTEM

A. Series TR-9100 - Single Hung Side Load.

B. Windows comply with Division 08 Aluminum Windows Section.

2.4 GLAZING

A. Glazing shall comply with requirements in Division 08 Glazing Section.

B. Glazing System:
1. Glazing method shall be a wet/dry type in accordance with manufacturer's standards.
2. Exterior glazing shall be silicone back bedding sealant.

3. Interior glazing shall be snap-in type glazing beads with an interior gasket in accordance with AAMA 702 or ASTM C 864.

2.5 HARDWARE

A. General Hardware Requirements:
   1. Provide manufacturer's standard hardware.
   2. Hardware shall be fabricated from aluminum, stainless steel, or other corrosion-resistant material that is compatible with aluminum.
   3. Hardware shall be designed to smoothly operate, tightly close, and securely lock sliding aluminum-framed glass doors.

B. Standard Operating Hardware:
   1. Aluminum Automatic Sill Locks.
   2. (Optional) White Bronze Automatic Sill Locks.
   3. (Optional) White Bronze Pole Ring on meeting rail.
   4. (Optional) Keyed plunger Limit Lock (Specify clear opening or travel distance in inches, e.g. 6").

2.6 ACCESSORY MATERIALS

A. Spacers, Setting Blocks, Gaskets, and Bond Breakers:
   1. Manufacturer's standard permanent, non-migrating types in hardness recommended by manufacturer,
   2. Shall be compatible with sealants, and suitable for system performance requirements.

B. Framing system gaskets, sealants, and joint fillers as recommended by manufacturer for joint types.

C. Sealants and joint fillers for joints at perimeter of window system as specified in Division 7 Section "Joint Sealants.

D. Perimeter Anchors:
   1. When steel anchors are used, provide insulation between steel material and aluminum material to prevent galvanic action.

E. Optional Muntin Grids:

EDITOR NOTE: Between the glass muntin finishes shall match the window unless specified otherwise.

   1. Shall be extruded aluminum profiles, 6063-T6 alloy and temper and as follows:
      a. True muntins.
      b. Between the glass muntins.
      c. Exterior applied muntins with muntin base.
      d. Interior applied flat stock.

F. Optional Exterior Panning and Interior Trims:

EDITOR NOTE: Panning and Trims may be standard or custom. For standard panning and trims refer to Kawneer.com.

1. Extruded aluminum, 6063-T6 alloy and temper, extruded to profiles and details indicated. Seal exterior joints with manufacturer's standard sealant to assure water-tight joints.
   a. Exterior Panning and Trims: All panning profiles shall be a minimum thickness of 0.062" (1.57 mm) to match the profiles as shown the drawings. Any profile variations shall be submitted to the architect and/or owner for approval 10 days prior to bid date. All panning shall be factory fabricated for field assembly. All corner joinery shall be factory cut. Joinery at the sill shall be coped and butt-type construction. All preparations for assembly shall be completed by the window manufacturer. Upon assembly, panning frame joints shall be back-sealed to prevent moisture penetration.
   b. Interior Trims: The interior face trim minimum wall thickness shall be 0.062" (1.57 mm). The face trim shall snap-fit onto concealed mounting clip. Exposed fasteners shall not be accepted. The mounting clip shall be extruded aluminum of 6063-T6 alloy and temper. The minimum wall thickness shall be 0.062" (1.57 mm). The trim clips shall be provided in 3" (76.2 mm) lengths and spaced a maximum of 18" (457.2 mm) center to center.

G. Coupling Mullions:
1. Shall be extruded aluminum of 6063-T6 alloy and temper of profile and dimensions indicated on drawings.
2. Mullions shall provide structural properties to resist wind pressure required by performance criteria and standards.

H. Insect Screens:
1. (Half Screen) Held in exterior applied PVC rigid tracks with two stainless steel leaf springs.
2. 7/16" x 1-1/4" x .045 extruded tubular aluminum frame with window finish.
3. Corners mitered, gusset reinforced, and crimped.
4. 18 x 16 dark fiberglass [Optional Aluminum] mesh secured to frame with PVC spline.

2.7 FABRICATION

A. Extrude or form aluminum shapes before finishing.

B. Fabricate components that, when assembled, have the following characteristics:
1. Profiles that are sharp, straight, and free of defects or deformations
2. Accurately fitted joints that are flush, hairline, and weatherproof
3. Physical and thermal isolation of glazing from framing members
4. Accommodations for thermal and mechanical movements of glazing and framing that maintain required glazing edge clearances
5. Fasteners, anchors, and connection devices that are concealed from view to the greatest extent possible

C. Window Frame Joinery:
1. Mitered and Mechanically clipped and/or staked.
2. Factory sealed frame and corner joints.

D. Fabricate aluminum windows in sizes indicated.

1. Include a complete system for assembling components and anchoring windows.

E. Fabricate aluminum windows that are re-glazable without dismantling sash or framing.

F. Thermally Broken Construction:
1. Fabricate aluminum windows with an integral, concealed, low-conductance thermal barrier; in a manner that eliminates direct metal-to-metal contact.
2. Thermal barriers shall be designed in accordance with AAMA TIR A8.
3. Thermal Barrier:
a. The thermal barrier shall consist of integral structural polyurethane thermal break installed by the window manufacturer in the frame members.

G. Mullions:
1. Provide mullions and cover plates as shown, matching window units, complete with anchors for support to structure and installation of window units.
2. Allow for erection tolerances and provide for movement of window units due to thermal expansion and building deflections, as indicated.
3. Provide mullions and cover plates capable of withstanding design loads of window units.

H. Sub Frames:
1. Provide sub frames with anchors for window units as shown, of profile and dimensions indicated but not less than 0.093" (2.4 mm) thick extruded aluminum.
2. Miter or cope corners, and join with concealed mechanical joint fasteners.
3. Finish to match window units.
4. Provide sub frames capable of withstanding design loads of window units.

I. Factory-Glazed Fabrication:
1. Glaze aluminum windows in the factory where practical and possible for applications indicated.
2. Comply with requirements in Division 08 Section “Glazing” and with AAMA/WDMA/CSA 101/I.S.2/A440 (NAFS).

J. Glazing Stops:
1. Provide snap-on glazing stops coordinated with Division 08 Section “Glazing” and glazing system indicated.
2. Provide glazing stops to match frame.

2.8 ALUMINUM FINISHES

EDITOR NOTE: Choose the appropriate finish below based on project requirements.

A. Finish designations that are prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.

B. Factory Finishing:
1. Kawneer Permanodic® AA-M10C21A44, AAMA 611, Architectural Class I Color Anodic Coating (Color _____)

2. Kawneer Permanodic® AA-M10C21A41, AAMA 611, Architectural Class I Clear Anodic Coating (Color #14 Clear) (Optional)
3. Kawneer Permanodic® AA-M10C21A31, AAMA 611, Architectural Class II Clear Anodic Coating (Color #17 Clear) (Standard)
4. Kawneer Permafluor™ (70% PVDF), AAMA 2605, Fluoropolymer Coating (Color _____)
5. Kawneer Permadize® (50% PVDF), AAMA 2604, Fluoropolymer Coating (Color _____)
6. Other: Manufacturer_____ Type _____ (Color _____)

PART 3 EXECUTION

3.1 EXAMINATION

A. With installer present, examine openings, substrates, structural support, anchorage, and conditions for compliance with requirements for installation tolerances and other conditions affecting performance of work:
   1. Verify rough opening dimensions.
   2. Verify levelness of sill plate.
   3. Verify operational clearances.
   4. Examine wall flashings, vapor retarders, water and weather barriers, and other built-in components for proper water management.
   5. Masonry Surfaces:
      a. Masonry surfaces must be visibly dry and free of excess mortar, sand, and other construction debris.
   6. Wood Frame Walls:
      a. Wood frame walls must be dry, clean, sound, well nailed, free of voids, and without offsets at joints.
      b. Ensure that nail heads are driven flush with surfaces in opening and within 3" (76.2 mm) of opening.
   7. Metal Surfaces:
      a. Metal surfaces must be dry and clean (free of grease, oil, dirt, rust, corrosion, and welding slag).
      b. Ensure that metal surfaces are without sharp edges or offsets at joints.

B. Proceed with installation only after correcting unsatisfactory conditions.

3.2 INSTALLATION

A. Comply with Drawings, Shop Drawings, and manufacturer's written instructions for installing windows, hardware, accessories, and other components.

B. Install aluminum-framed window system so that components:
   1. Are level, plumb, square, and true to line
   2. Are without distortion and do not impede thermal movement
   3. Are anchored securely in place to structural support
   4. Are in proper relation to wall flashing and other adjacent construction

C. Set sill members in bed of sealant or with gaskets, as indicated, for weather-tight construction.

D. Install aluminum-framed window system and components to drain condensation, water penetrating joints, and moisture migrating within system to the exterior.

E. Separate aluminum and other corrodible surfaces from sources of corrosion or electrolytic action at points of contact with other materials.

PART 4 FIELD QUALITY CONTROL

A. Field Tests:
1. Architect shall select window units to be tested as soon as a representative portion of the project has been installed, glazed, perimeter caulked and cured.
2. Conduct tests for air infiltration and water penetration with manufacturer's representative present.
3. Tests that do not meet the specified performance requirements and units that have deficiencies shall be corrected as part of the contract amount.
4. Testing shall be performed per AAMA 502 by a qualified independent testing agency. Refer to Testing Section for payment of testing and testing requirements.
5. Air Infiltration Tests:
   a. Conduct tests in accordance with ASTM E 783.
   b. AW rating: Test shall be conducted at a minimum uniform static pressure of 6.2 psf (300 Pa). The maximum allowable rates of air infiltration for field testing shall not exceed 1.5 times the project specifications
6. Water Infiltration Tests:
   a. Conduct tests in accordance with ASTM E 1105.
   b. No uncontrolled water infiltration is permitted when tested at a static test pressure equal to two-thirds of the tested laboratory performance test pressure.

B. Manufacturer's Field Services:
1. Upon owner's written request, provide periodic site visit by manufacturer's field service representative.

PART 5 ADJUSTING, CLEANING, AND PROTECTION

A. Adjusting:
1. Adjust operating sashes, screens, hardware, and accessories for tight fit at contact points and weather stripping for smooth operation and weather tight closure.
2. Lubricate hardware and moving parts.

B. Cleaning:
1. Avoid damaging protective coatings and finishes.
2. Clean glass and aluminum surfaces of product immediately after installation.
3. Comply with glass manufacturer's written recommendations for final cleaning and maintenance.
4. Remove non-permanent labels and clean surfaces.
5. Remove excess sealants, glazing materials, dirt, and other substances.

6. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during the construction period.
7. Remove construction debris from project site and legally dispose of debris.

C. Protection:
1. Protect installed product's finish surfaces from damage during construction.

END OF SECTION 085113

NOTES AND DISCLAIMERS

Laws and building and safety codes governing the design and use of Kawneer products, such as glazed entrance, window, and curtain wall products, vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor. It is the responsibility of the owner, the specifier, the architect, the general contractor, and the installer and the fabricator/transformer, consistent with their roles, to determine the appropriate materials for a project in strict conformity to all applicable national, regional and local building codes and regulations.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

Information contained herein or related hereto is intended only for evaluation by technically skilled persons, with any use thereof to be at their independent discretion and risk. Such information is believed to be reliable, but Kawneer shall have no responsibility or liability for results obtained or damages resulting from such use.

This guide specification is intended to be used by a qualified construction specifier. The guide specification is not intended to be used verbatim as a project specification without appropriate modifications for the specific use intended. The guide specification must be used and coordinated with the procedures of each design firm and the particular requirements of a specific construction project.

Kawneer grants no license under, and shall have no responsibility or liability for infringement of, any patent or other proprietary right. Nothing in this document should be construed as a warranty or guarantee by Kawneer, and the only applicable warranties will be those set forth in Kawneer acknowledgment or in any printed warranty documents issued by Kawneer. The foregoing may be waived or modified only in writing by a Kawneer officer.

Thermal Technology

Taming the Elements to Increase Your Competitive Edge

KAWNEER

kawneer.com

Today's architects, contractors and building owners help create buildings that offer occupants better performance, protection and possibility. They work to build their legacies by meeting evolving market demands, incorporating sustainable solutions and using durable products built to last. And they are more aware of stretching their dollars than ever before. In short, they demand performance that withstands climate extremes, while maintaining fiscal and environmental responsibility.

To meet the demands of decision-makers in both the new construction and remodel/restoration markets, manufacturers must improve quality, enhance durability, make design improvements and test thoroughly before, during and after manufacture.

Whether your building is new, retrofit or historically restored, you should consider the energy savings that result from the latest thermal technologies. They provide your building with a competitive edge – both now and for the future.

When designing systems and products, Kawneer considers the benefits of thermal barriers and how they relate to your needs and applications. Occupant comfort, energy savings, structural performance, sustainability and condensation resistance all remain top of mind.

Heat Transfer

To keep buildings running efficiently, commercial façade and fenestration products need to combat the transfer of heat from exterior and interior environments. There are three basic types of heat transfer: **conduction**, **convection** and **radiation**.

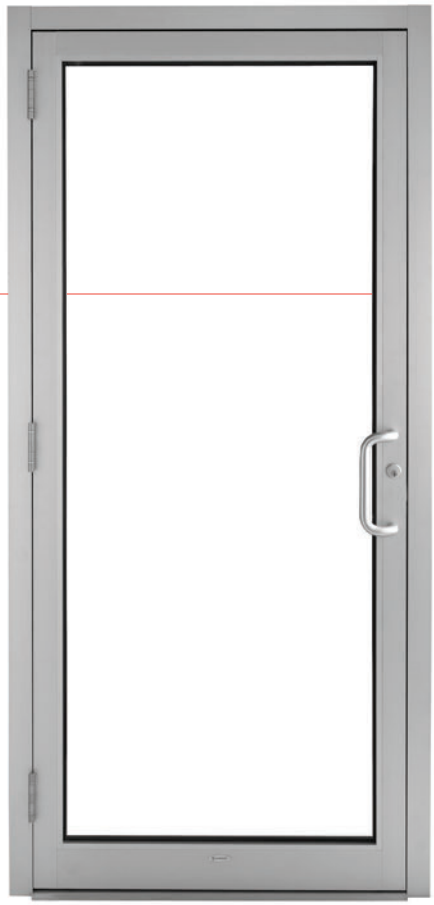
Since aluminum has a high level of heat transfer via conduction, a thermal barrier must be integrated into the system to minimize heat transfer.

Structural Performance

Structural loading is an important consideration when designing a thermally broken system. **Tension**, **torsion** and **shear forces** are all transferred through the thermal barrier, which must be able to handle these forces. Additionally, composite assemblies and non-composite assemblies react to and perform differently because of these structural performance factors.

Composite strength and thermal cyclic durability of Kawneer systems are calculated (or tested) per AAMA TIR-A8-2016 standards.

Thermal Barriers +
Energy Efficiency =
Increased Marketability



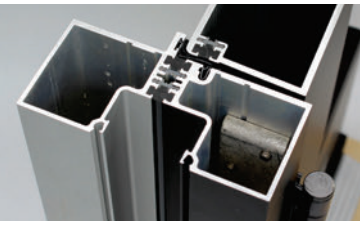
Many types of thermal barriers have been developed as a result of product research, market changes, consumer and owner demand. To assist your decision-making process, a description of the major types follows.

In general, there are two broad classifications of thermal barriers: thermally broken and thermally improved.

- A product is considered **thermally broken** if the separation between the interior and exterior metal is 0.21" (5.3 mm) or greater.
- **Thermally improved** systems are generally defined as having a separation between the interior and exterior metal of less than 0.21" (5.3 mm) but not less than 0.0625" (1.59 mm).

Official definitions can be referenced from industry standards ANSI/NFRC 100 (Thermally Broken Members) and AAMA 507 (Thermal Barrier Framing System). Examples of such systems include pour and debridged urethane systems, crimped in place polymer isolator systems and pressure-glazed systems with intermittent fasteners.

IsoPour™ Thermal Break Technology

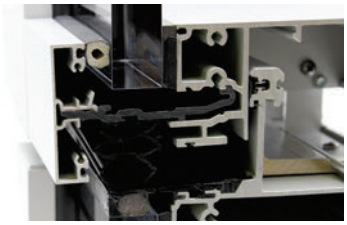


By merging industry-proven pour and debridge and polymer isolator technologies, the patented IsoPour™ Thermal Break technology creates thermally broken assemblies for enhanced building energy efficiencies with high structural performance.

IsoPour™ Thermal Break technology helps eliminate cold spots, reduce condensation and provides dual finish options for design flexibility. And, the unique thermal break allows for more complex aluminum extrusion shapes, so when used in thermally broken doors a wider choice of locking option hardware is available.

Example products: 250T/350T/500T Insulpour® Thermal Entrances

Continuous Polyamide Thermal Break

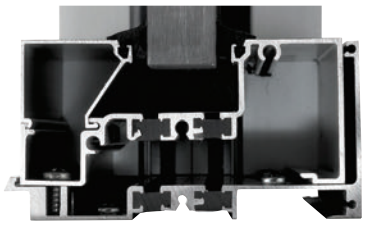


A continuous polyamide thermal break applied vertically and horizontally helps provide ultra-thermal performance levels. Extruded polymer inserts allow a great deal of flexibility – changing the depth of the infill from a double insulating glass unit (IGU) to a triple IGU is as easy as changing the depth of the thermal separator. Depending on the depth of the separator and IGU type, the performance can be thermal, high-thermal or ultra-thermal.

This technology offers design flexibility for different exterior and interior finishes. The ultra-thermal performance option allows architects and designers to take their vision to a new level, regardless of climate or location.

Example product: 2500 UT Unitwall® System

IsoLock® Pour and Debridge Thermal Break



Pour and debridge (P&D) thermal breaks offer a cost-effective solution with superior thermal performance and a single-piece extrusion. Options are available in single and dual pocket designs.

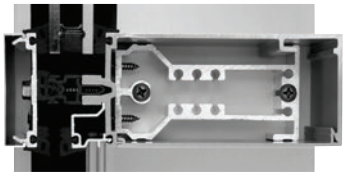
Factory-supplied P&D products involve pouring liquid urethane into a cavity or thermal pocket, allowing it to harden and cutting away a small section of aluminum opposite the pour area to fully separate the exterior aluminum from the interior aluminum. This thermal barrier means there are fewer parts to cut and assemble. Therefore, less labor is needed and costs are reduced.

Kawneer's P&D thermal products utilize an IsoLock® process to eliminate expansion and contraction of urethane. The IsoLock® process can be achieved by one of two means. Prior to the pouring operation, the aluminum is either lanced into the cavity at increments of 1-1/2", or the interior of the thermal pocket is abraded. The lanced or abraded surface creates a mechanical lock in the urethane before it hardens, eliminating any potential for shrinkage. The mechanical locks, combined with the adhesive bond of the urethane to the aluminum, create a composite section used to meet design wind loads.

Example products: Trifab® 451T Framing System, Trifab® 601T Framing System, IR 501T Framing System, 8400TL Thermal Windows, MetroView® FG 501T Window Wall

Example products with dual IsoLock® lanced pour and debridge thermal breaks: Trifab® 451UT Framing System, Trifab® 601UT Framing System, IR 501UT Framing System

Thermal Separators



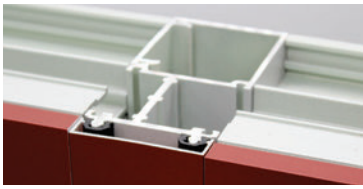
Thermal separators are typically made from engineered polymers or EPDM (ethylene propylene diene monomer) and used in curtain wall systems.

The low-conductance separator is positioned within the gutter of exterior-glazed curtain wall systems to simply and effectively separate the pressure plate and cover from the inside. This allows the interior mullion to carry the load for high structural performance and the exterior snap-on cover to have a different finish from the interior.

Systems with this thermal break method tout ease of assembly and can be leveraged for both double and triple pane insulating glass.

Example products: 1600 Wall System®1 Curtain Wall, 1600UT System™1 Curtain Wall

Thermal Isolator Clip

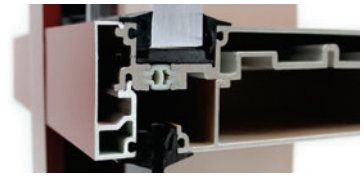


The thermal isolator clip method is used on curtain walls. Efficiently isolating the interior trim from the structural mullion, the clip improves the U-factor and CRF (condensation resistance factor) of these products.

This cost-effective thermal barrier is typically considered to be thermally improved and also provides the capability for different interior and exterior finishes.

Example product: 2250 IG (Inside Glazed) Curtain Wall System, 1600 Wall System®5 Curtain Wall

IsoStrut® Thermal Break



The patented IsoStrut® Thermal Break method achieves a high-strength bond between the aluminum and the thermal break material, which creates a composite assembly suitable for use in monumental curtain walls.

Since the assembly comprises two separate aluminum extrusions, different exterior and interior finishes are possible at very competitive prices.

Example products: 1600 Wall System®3 Curtain Wall, 1600 Wall System®4 Curtain Wall

Engineered Polymer Clip

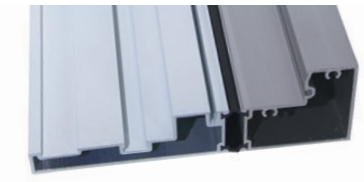
Engineered polymer clips are placed intermittently to separate the face and gutter of low-rise curtain walls and other framing systems. The clip eliminates contact between exterior and interior aluminum so that the transfer of heat is reduced from the inside to the outside or vice versa. The interior-exterior separation also helps prevent interior condensation.

The dual-purpose clip separates and connects the two extrusion halves, providing a variety of combinations that can be joined for economy and strength. The two-piece system also allows different finish combinations, providing for design and cost flexibility.

This thermal barrier is typically considered to be thermally improved.

Example products: 2250 L-R Wall System, EnCORE® Framing System

IsoWeb® Thermal Break



To improve the U-factor and CRF, the IsoWeb® thermal break system consists of two parallel glass-reinforced nylon strips installed continuously along the length of the extrusion. The depth of the thermal break can accommodate standard insulating infills of 1" thick or it can be increased to accept high-performance, triple-sealed insulating units.

Like the IsoStrut thermal break, two separate extrusions are used in the assembly, which allows different finishes on the interior and exterior. The mechanical lock at the nylon/aluminum interface provides for a stiff composite section, which is used in windows and framing systems.

Example products: 5500/5525 Thermal Windows, AA®6400/6500/6600 Thermal Windows, OptiQ®AA®4325 Series Windows, OptiQ®AA®5450 Series Windows, AA®250/425 Thermal Entrances, 2000T Terrace Doors, AA®3200 Thermal Sliding Doors, PG 123® Framing, 7500 Wall® Curtain Wall System

The Right Thermal Product for Your New Construction or Remodel Project

For decades, Kawneer has utilized its leading-edge knowledge of materials and manufacturing to design a series of products for increased energy conservation.

In fact, Kawneer was founded with an innovative product designed for durability and thermal efficiencies. Company founder and architect Francis Plym invented the first system to utilize metal to replace wood as a holder of heavy plate glass. His design also included ventilation openings to equalize the temperature on both sides of the glass. The patent was granted on May 15, 1906.

Kawneer incorporates these invaluable decades of experience with its philosophy of providing only the highest-quality products for the manufacture of thermal products. Each building situation is different, especially today. And different situations demand a range of precisely engineered products.

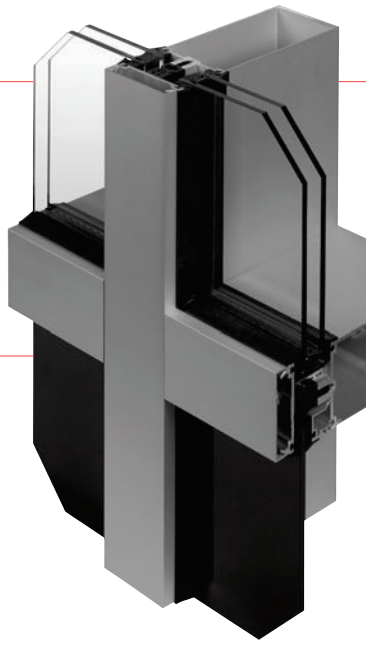
Kawneer's solutions draw on a long history of innovation to create next-generation technologies that inspire architects, contractors and glaziers to build better buildings. We advance our solutions to help build legacies. Kawneer's complete line of thermal framing, curtain walls and windows was designed with two principles in mind:

- To provide the highest-quality thermal products and thermal performance in the industry.
- To provide thermal products that respond to today's specific needs for framing, storefronts, curtain walls or windows — whether new, remodel, retrofit or historic renovation.

That's why Kawneer offers a wide range of thermal systems and solutions.

In today's highly competitive new construction and retrofit markets, Kawneer recognizes that quality assurance is vital. And a large part of that assurance comes from delivering the right product for your specific project.

Kawneer's thermal products offer a legacy of quality and a product line precisely engineered to solve most thermal challenges, supported by strict quality control during the manufacturing process. All products are manufactured and tested according to applicable NFRC, AAMA and ASTM procedures.



Building Legacies

Thermal performance will continue to be a trend for years to come. As market requirements shift, the need for thermal performance remains a constant. Kawneer is always pushing the envelope when it comes to delivering innovative, high-performing thermal solutions. Our standards of success are high to ensure we meet your needs. We build on the past to advance the future to help build your legacy.

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