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Facility Name: **Chex Inc.**

Application Number: **14-4653**

Date: **Draft PTI (Date will be entered upon final issuance)**

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as

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an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

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BEST AVAILABLE TECHNOLOGY

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws and regulations.

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Chex Inc.** located in **Hamilton** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Ohio
EPA
Source
Number

Source
Identification
Description

B003

73.7 MMBtu/HR #2
oil and natural
gas fired boiler

B003 cont'd

B002 cont'd

B002

73.7 MMBtu/HR #2
oil and natural
gas fired boiler

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BAT Determination

Limited usage of #2 fuel oil, limited sulfur content in #2 fuel oil, emissions limitations and the use of a low NO_x burner

Limited usage of #2 fuel oil, limited sulfur content in #2 fuel oil, emissions limitations and the use of a low NO_x burner

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
		3745-15-07		Permit Allowable Mass Emissions and/or Control/Usage Requirements
	Applicable Federal & OAC Rules	3745-17-07 (A)		
		3745-17-10		
3745-31-05		3745-18*	3745-15-07	0.2 LB CO/MMBtu (oil)
		40 CFR Part 60 Subpart Dc	3745-17-07 (A)	0.17 LB NO _x /MMBtu (oil)
			3745-17-10	0.02 LB PM/PM ₁₀ /MMBtu (oil & natural gas)
			3745-18*	
		3745-31-05		0.304 LB SO ₂ /MMBtu (oil)
			40 CFR Part 60 Subpart Dc	0.0146 LB OC/MMBtu (oil & natural gas)
				0.06 LB CO/MMBtu (gas)
				0.08 LB NO _x /MMBtu (gas)
				0.0006 LB SO ₂ /MMBtu (gas)
				Combined emission limits for B002 and B003:
				37.98 TPY CO
				37.79 TPY NO _x
				40.54 TPY SO ₂
				6.45 TPY PM/PM ₁₀
				4.71 TPY OC

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
	natural gas)	PM/MMBtu		
See General Terms	0.304 LB SO ₂ /MMBtu (oil)	Less Stringent than BAT		
Less Stringent	0.0146 LB OC/MMBtu (oil & natural gas)	See Additional Special Terms and Conditions A.2 and C.1		
0.02 LB PM/MMBtu	0.06 LB CO/MMBtu (gas)			
Less Stringent than BAT	0.08 LB NO _x /MMBtu (gas)			
See Additional Special Terms and Conditions A.2 and C.1	0.0006 LB SO ₂ /MMBtu (gas)			
	Combined emission limits for B002 and B003:			
	37.98 TPY CO			
	37.79 TPY NO _x			
	40.54 TPY SO ₂			
0.2 LB CO/MMBtu (oil)	6.45 TPY PM/PM ₁₀			
0.17 LB NO _x /MMBtu (oil)	4.71 TPY OC			
0.02 LB PM/PM ₁₀ /MMBtu (oil &	See General Terms			
0.02 LB	Less Stringent			
	0.02 LB			

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- * The emission limitations established by this rule is less stringent than the requirements established in OAC rule 3745-31-05.

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Organic Compound	4.71
PM	6.45
SO ₂	40.54
NO _x	37.79
CO	37.98
PM ₁₀	6.45

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REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Dept. of Environmental Services, Air Quality Programs, 1632 Central Parkway, Cincinnati, Ohio 45210.**

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Dept. of Environmental Services, Air Quality Programs, 1632 Central Parkway, Cincinnati, Ohio 45210..**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

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CONSTRUCTION COMPLIANCE CERTIFICATION

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Applicable Emission Limitations and/or Control Requirements

1. The LB/MMBtu and ton per year emission limitations for emissions units B002 and B003 are listed in the air emission summary page.
2. Visible particulate emissions shall not exceed 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity.

B. Operational Restrictions

1. The permittee shall install, operate and maintain low-NOx burners at all times when operating emissions units B002 and B003.
2. The start up of emissions units B002 and B003, shall be concurrent with the complete and permanent shutdown of Ohio EPA emissions unit B001.
3. The total heat input for emissions units B002 and B003 combined shall not exceed 73.7 MMBtu/hr at any one point in time.
4. The quality of the oil burned in emissions units B002 and B003 shall meet the following specifications on an "as received" basis:
 - a. a sulfur content not to exceed 0.3% which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.304 pound sulfur dioxide/MMBtu actual heat input; and,
 - b. greater than 140,000 Btu/gallon of oil.

Compliance with the above-mentioned specifications shall be determined by using the analytical results provided by the permittee or oil supplier for each shipment of oil.

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5. The maximum amount of No. 2 fuel oil used in emissions units B002 and B003 combined shall not exceed 1,900,000 gallons per year based upon a rolling, 12-month summation.

To ensure federal enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the fuel oil usage levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Gallons of No. 2 Fuel Oil for B002 and B003 Combined</u>
1-2	950,000
1-3	950,000
1-4	950,000
1-5	950,000
1-6	950,000
1-7	1,108,333
1-8	1,266,667
1-9	1,425,000
1-10	1,583,333
1-11	1,741,667
1-12	1,900,000

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual fuel oil usage limitation shall be based upon a rolling, 12-month summation of the monthly fuel usage in gallons.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the quantity of oil (in gallons) and natural gas (mmft³) used in emissions units B002 and B003.
2. For each shipment of oil received for burning in emissions units B002 and B003, the permittee shall maintain records of the name of the oil supplier, the

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total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content.

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Hamilton County Department of Environmental Services.

3. The permittee shall maintain hourly records which contain the following:
 - a. the combined steam flow rate for emissions unit B002 and B003 in pounds per hour; and,
 - b. the combined total heat input for emissions unit B002 and B003 in MMBtu per hour.
4. The permittee shall maintain monthly records of the following information:
 - a. the #2 fuel oil usage for each month; and,
 - b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling 12-month summation of the #2 fuel oil usage figures.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative #2 fuel oil usage for each calendar month.

5. Each record of any monitoring data, testing data and support information required pursuant to this permit shall be retained for a period of five years from the

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date the record was created. Support information shall include, but not limited to, all calibration and

maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit. Such records may be maintained in computerized form.

D. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment (gallons);
 - b. the weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil received during each calendar month; and,
 - c. the weighted* average heat content (Btu/gallon) of the oil received during each calendar month.

* In proportion to the quantity of oil received in each shipment during each calendar month.

These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall cover the oil shipments received during the previous calendar quarters.

2. The permittee shall submit annual reports which specify the total NO_x, SO₂ and CO emissions from emissions units B002 and B003 combined for the previous calendar year. These reports shall be submitted by January 31 of each year.

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3. The permittee shall submit required reports in the following manner:
 - a. reports of any required monitoring and/or recordkeeping information shall be submitted to the Hamilton County Dept. of Environmental Services; and,
 - b. except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Hamilton County Dept. of Environmental Services. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter.

The reports shall be submitted quarterly, i.e. by January 30, April 30, July 30, and October 30 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

4. The permittee shall submit deviation (excursion) reports that identify each hour when the combined heat input rating from emissions units B002 and B003 exceeds 73.7 MMBtu/hr.
5. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month #2 fuel oil usage limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable monthly #2 fuel oil usage limitation.

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E. Testing Requirements

1. Compliance with the visible particulate limitation shall be demonstrated by the Methods outlined in USEPA Reference Method 9.
2. Compliance with the sulfur limitations shall be determined by the fuel oil analysis and recordkeeping.
3. Compliance with the emission limitations outlined in this permit shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI 14-4653 submitted 9/18/98.
4. Compliance with the fuel oil usage limitation will be demonstrated by the recordkeeping in T&C C.4.
5. Compliance with the heat input limitation will be determined by the recordkeeping in T&C C.3.
6. The permittee shall conduct, or have conducted, emission testing for either emissions unit B002 or B003 in accordance with the following requirements:
 - a. the emission testing shall be conducted within six months after startup of these emissions units;
 - b. the emission testing shall be conducted to demonstrate compliance with the allowable NOx and opacity (both emissions units) limitations while combusting natural gas;
 - c. the following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 7 and 9. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services; and,
 - d. the test(s) shall be conducted while the emissions

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unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

F. Miscellaneous Requirements

1. The following is a summary of the netting emissions in tons per year (TPY):

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<u>Emissions Unit</u>	<u>Pollutant</u>	<u>Increase</u>	<u>Decrease</u>
B001	SO ₂		-30.31*
B002 and B003	SO ₂	+40.54	
Net Emission Change		+10.23	

* Based on the average actual emissions from the last two years of operation (1996, 1997).