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Facility Name: **CSC, LTD.**

Application Number: **02-2660**

Date: **January 6, 1999**

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

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(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 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.

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

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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 **CSC, LTD.** located in **Trumbull** 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

B003

B004

B005

B006
cont'd

B006

B005
cont'd

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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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Use of Natural Gas;
 Low-NO_x Burners

BAT
Determination

Use of Natural
 Gas; Low-NO_x
 Burners

Use of Natural
 Gas; Low-NO_x
 Burners

Use of Natural Gas;
 Low-NO_x Burners

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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>
			40 CFR, Part 60 Subpart Dc	
		3745-31-05		
		3745-17-07		
	Applicable	3745-17-10*		
	Federal &	3745-18-06*		
	<u>OAC Rules</u>			
		3745-21-08		
3745-31-05		3745-23-06		
3745-17-07		40 CFR, Part		
3745-17-10*		60 Subpart		
3745-18-06*		Dc		
3745-21-08				
3745-23-06				
40 CFR, Part				
60 Subpart				
Dc				
			3745-31-05	
			3745-17-07	
			3745-17-10*	
			3745-18-06*	
			3745-21-08	
			3745-23-06	
			40 CFR, Part	
			60 Subpart	
			Dc	
		3745-31-05		
		3745-17-07		
		3745-17-10*		
		3745-18-06*		
		3745-21-08		
		3745-23-06		

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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>
		**	(0.0075 lb/mmBtu)	(0.0824 lb/mmBtu)
Permit Allowable Mass Emissions and/or Control/Usage Requirements	Use of Natural Gas; Low NO _x Burners;	Use of Natural Gas; Low NO _x Burners;	NO _x : 0.43 pound/hour, and 1.87 TPY (0.017 lb/mmBtu)	SO ₂ : 0.02 pound/hour, and 0.07 TPY (0.0006 lb/mmBtu)
Use of Natural Gas; Low NO _x Burners;	PM/PM ₁₀ : 0.19 pound/hour, and 0.83 TPY (0.0075 lb/mmBtu)	PM/PM ₁₀ : 0.19 pound/hour, and 0.83 TPY (0.0075 lb/mmBtu)	CO: 2.07 pounds/hour, and 9.06 TPY (0.0824 lb/mmBtu)	VOC: 0.14 pound/hour, and 0.60 TPY (0.0054 lb/mmBtu)
PM/PM ₁₀ : 0.19 pound/hour, and 0.83 TPY (0.0075 lb/mmBtu)	NO _x : 0.43 pound/hour, and 1.87 TPY (0.017 lb/mmBtu)	NO _x : 0.43 pound/hour, and 1.87 TPY (0.017 lb/mmBtu)	SO ₂ : 0.02 pound/hour, and 0.07 TPY (0.0006 lb/mmBtu)	**
NO _x : 0.43 pound/hour, and 1.87 TPY (0.017 lb/mmBtu)	CO: 2.07 pounds/hour, and 9.06 TPY (0.0824 lb/mmBtu)	CO: 2.07 pounds/hour, and 9.06 TPY (0.0824 lb/mmBtu)	VOC: 0.14 pound/hour, and 0.60 TPY (0.0054 lb/mmBtu)	**
CO: 2.07 pounds/hour, and 9.06 TPY (0.0824 lb/mmBtu)	SO ₂ : 0.02 pound/hour, and 0.07 TPY (0.0006 lb/mmBtu)	SO ₂ : 0.02 pound/hour, and 0.07 TPY (0.0006 lb/mmBtu)	Use of Natural Gas; Low NO _x Burners;	
SO ₂ : 0.02 pound/hour, and 0.07 TPY (0.0006 lb/mmBtu)	VOC: 0.14 pound/hour, and 0.60 TPY (0.0054 lb/mmBtu)	VOC: 0.14 pound/hour, and 0.60 TPY (0.0054 lb/mmBtu)	PM/PM ₁₀ : 0.19 pound/hour, and 0.83 TPY (0.0075 lb/mmBtu)	
VOC: 0.14 pound/hour, and 0.60 TPY (0.0054 lb/mmBtu)	Use of Natural Gas; Low NO _x Burners;	Use of Natural Gas; Low NO _x Burners;	NO _x : 0.43 pound/hour, and 1.87 TPY (0.017 lb/mmBtu)	
	PM/PM ₁₀ : 0.19 pound/hour, and 0.83 TPY	PM/PM ₁₀ : 0.19 pound/hour, and 0.83 TPY	CO: 2.07 pounds/hour, and 9.06 TPY	

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SUMMARY
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
PM/PM ₁₀	3.32
NO _x	7.48
CO	36.24
SO ₂	0.28
VOC	2.40

NSPS REQUIREMENTS

The following sources are subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

<u>Source Number</u>	<u>Source Description</u>	<u>NSPS Regulation (Subpart)</u>
B003 thru B006	600 HP Fluid Heaters No. 1 thru No. 4 (25.1 MMBH Each)	DC

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

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- a. construction date (no later than 30 days after such date);
- b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. actual start-up date (within 15 days after such date); and
- d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, OH 43216-3669

and **Northeast District Office**
2110 E. Aurora Road
Twinsburg, Ohio 44087

PERFORMANCE TEST REQUIREMENTS

The permittee shall conduct, or have conducted, performance testing on the air contaminant source(s) in accordance with procedures approved by the Agency. Two copies of the written report describing the test procedures followed and the results of such tests shall be submitted and signed by the person responsible for the test. The Director, or an Ohio EPA representative, shall be allowed to witness the test, examine testing equipment, and require the acquisition or submission of data and information necessary to assure that the source operation and testing procedures provide a valid characterization of the emissions from the source and/or the performance of the control equipment.

- A. A completed Intent to Test form shall be submitted to the Ohio EPA, Northeast District Office where the original permit application was filed. This notice shall be made 30 days in advance and shall specify the source operating parameters, the proposed test procedures, and the time, date, place and person(s) conducting such tests.
- B. Two copies of the test results shall be submitted within 30 days after the completion of the performance test.

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C. Tests shall be performed for the following source(s) and pollutants(s):

<u>Source</u>	<u>Pollutant(s)</u>
B003	NO _x

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Northeast District Office, 2110 E. Aurora Road, Twinsburg, Ohio 44087.**

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.

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

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Introduction

This is a permit to install for the installation of four new natural gas fired, 600 horsepower, fluid heaters (25.1 MMBH rated heat input each) (B003 thru B006). The four new fluid heaters will replace two existing boilers, B001 and B002, at CSC, Ltd.

A. Emission Limitations and Control Requirements

1. Fluid Heaters No. 1 thru 4, (B003 thru B006)

Each of the four new fluid heaters shall be equipped with low-NO_x natural gas burners capable of achieving a NO_x emission rate of 0.017 lb/mmBtu of actual heat input.

B. Operational Restriction

1. None

C. Monitoring and Record Keeping Requirements

1. Fluid Heaters No. 1 thru 4, (B003 thru B006)

CSC, Ltd. shall record and maintain records of the amounts of each fuel combusted during each day. All records required under this section shall be maintained by CSC, Ltd. for a period of two years following the date of such record.

D. Reporting Requirement

1. None

E. Testing Requirements and Compliance Method Determinations

1. Compliance with the applicable visible particulate emission limitation for these emissions units and the NO_x emission limitation in Section I. of these Additional Special Terms and Conditions shall be determined in accordance with the

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following methods:

Fluid Heaters No. 1 thru 4 (B003 thru B006)

a. Emission Limitation

Visible particulate emissions from the fluid heater stack(s) shall not exceed twenty per cent opacity, as a six-minute average except as follows: Visible particulate emissions from the fluid heater stack(s) may exceed twenty per cent opacity, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed sixty per cent opacity, as a six-minute average, at any time.

Applicable Compliance Method

Visible particulate emissions shall be determined according to test method nine as specified in OAC rule 3745-17-03(B) (1).

b. Emission Limitation

NO_x emissions from each fluid heater shall not exceed 0.017 lb/mmBtu of actual heat input.

Applicable Compliance Method

Method 7E of 40 CFR Part 60, Appendix A, shall be used to demonstrate compliance. Alternative U.S.EPA approved test methods may be used with prior approval from the Ohio EPA.

2. Compliance with the permit allowable mass emissions of PM/PM₁₀, NO_x, CO, SO₂ and VOC specified in the permit to install air emission summary for these emissions units shall be determined in accordance with the following methods:

Fluid Heaters No. 1 thru 4 (B003 thru B006)

a. Emission Limitation

PM/PM₁₀ emissions from each fluid heater shall not exceed 0.19 pound per hour.

Applicable Compliance Method

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To determine the actual hourly emission rate for PM/PM₁₀, emission factors specified in AP-42, Section 1.4, Table 1.4-2 (Revised Fifth Edition, Supplement D, 1998) shall be used.

b. Emission Limitation

PM/PM₁₀ emissions from each fluid heater shall not exceed 0.83 tons per year.

Applicable Compliance Method

Compliance shall be based on the total annual heat input to the heater and emission factors specified in AP-42, Section 1.4, Table 1.4-2 (Revised Fifth Edition, Supplement D, 1998).

c. Emission Limitation

NO_x emissions from each fluid heater shall not exceed 0.43 pound per hour.

Applicable Compliance Method

To determine the actual hourly emission rate for NO_x, results from the required Method 7E compliance emission testing shall be used.

d. Emission Limitation

NO_x emissions from each fluid heater shall not exceed 1.87 tons per year.

Applicable Compliance Method

Compliance shall be based on the total annual heat input to the heater and results from the required Method 7E compliance emission testing.

e. Emission Limitation

CO emissions from each fluid heater shall not exceed 2.07 pounds per hour.

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Applicable Compliance Method

To determine the actual hourly emission rate for CO, emission factors specified in AP-42, Section 1.4, Table 1.4-1 (Revised Fifth Edition, Supplement D, 1998) shall be used.

f. Emission Limitation

CO emissions from each fluid heater shall not exceed 9.06 tons per year.

Applicable Compliance Method

Compliance shall be based on the total annual heat input to the heater and emission factors specified in AP-42, Section 1.4, Table 1.4-1 (Revised Fifth Edition, Supplement D, 1998).

g. Emission Limitation

SO₂ emissions from each fluid heater shall not exceed 0.02 pound per hour.

Applicable Compliance Method

To determine the actual hourly emission rate for SO₂, emission factors specified in AP-42, Section 1.4, Table 1.4-2 (Revised Fifth Edition, Supplement D, 1998) shall be used.

h. Emission Limitation

SO₂ emissions from each fluid heater shall not exceed 0.07 tons per year.

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Applicable Compliance Method

Compliance shall be based on the total annual heat input to the heater and emission factors specified in AP-42, Section 1.4, Table 1.4-2 (Revised Fifth Edition, Supplement D, 1998).

i. Emission Limitation

VOC emissions from each fluid heater shall not exceed 0.14 pound per hour.

Applicable Compliance Method

To determine the actual hourly emission rate for VOC, emission factors specified in AP-42, Section 1.4, Table 1.4-2 (Revised Fifth Edition, Supplement D, 1998) shall be used.

j. Emission Limitation

VOC emissions from each fluid heater shall not exceed 0.60 tons per year.

Applicable Compliance Method

Compliance shall be based on the total annual heat input to the heater and emission factors specified in AP-42, Section 1.4, Table 1.4-2 (Revised Fifth Edition, Supplement D, 1998).

3. CSC, Ltd. shall conduct, or have conducted, emission testing for one of the fluid heaters in accordance with the following requirements:
- a. Emission testing shall be conducted within 3 months after issuance of the permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for NO_x.
 - c. The following test method shall be employed to demonstrate compliance with the allowable emission rate for NO_x: Method 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the

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Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

Test"
District

Not later than 30 days prior to the proposed test date(s), CSC, Ltd. shall submit an "Intent to notification to the Ohio EPA Northeast

Office. 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 Ohio EPA District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast District Office 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.

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 Ohio EPA Northeast District Office within 30 days following completion of the test(s). CSC, Ltd. may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

F. Miscellaneous Requirements

- 1. None

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