

# ADEQ MINOR SOURCE AIR PERMIT

Permit #: 406-IR-1

IS ISSUED TO:

USFDA National Center for Toxicological Research  
3900 NCTR Road  
Jefferson, AR 72079  
Jefferson County  
CSN: 35-0118

THIS PERMIT IS YOUR AUTHORITY TO CONSTRUCT, MODIFY, OPERATE, AND/OR MAINTAIN THE EQUIPMENT AND/OR FACILITY IN THE MANNER AS SET FORTH IN THE DEPARTMENT'S MINOR SOURCE AIR PERMIT AND YOUR APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. SEC. 8-4-101 ET SEQ.) AND THE REGULATIONS PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

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Keith A. Michaels

Date

## **SECTION I: FACILITY INFORMATION**

PERMITTEE:           USFDA National Center for Toxicological Research  
CSN:                   35-0118  
PERMIT NUMBER:       406-IR-1

FACILITY ADDRESS:    3900 NCTR Road  
                          Jefferson, AR 72079

COUNTY:               Jefferson

CONTACT POSITION:     Danny Forbush  
TELEPHONE NUMBER:   (870) 543-7245

REVIEWING ENGINEER:  Wesley Crouch

UTM North-South (X):  Zone 15: 3804.722  
UTM East-West (Y):    Zone 15: 584.129

## **SECTION II: INTRODUCTION**

### **Summary**

The United States Food and Drug Administration operates the National Center for Toxicological Research (NCTR) at 3900 NCTR Road in Jefferson, Arkansas. This modification to air permit #406-AI will cover previously unpermitted sources and allow this facility to burn liquids (Type 5 waste) in its incinerator.

### **Process Description**

The incinerator is used to combust specific waste streams generated at this facility. These waste streams include: 1) laboratory animal bedding (wood chips) and excreta, 2) animal carcasses, 3) solid non-hazardous laboratory wastes, and 4) aqueous non-hazardous laboratory wastes. The waste animal bedding is fed into a conveyor system at the Building 53 animal care processing facility and emptied into a hopper in Building 46. During incinerator operation, the animal bedding is conveyed to another hopper above the incinerator. This hopper is timed to release the waste bedding directly into the incinerator at a rate of 1,000 pounds per hour. All other waste streams are ram fed to the incinerator. The carcasses of sacrificed laboratory animals (mice, rats, monkeys) are placed into double lined plastic bags and stored in freezers at Building 46. The solid non-hazardous laboratory wastes are those wastes that are generated in the NCTR's laboratories but do not meet the EPA's definition for hazardous waste (i.e., disposable gloves, pipettes, etc.). Similarly, the aqueous non-hazardous wastes are generated in laboratories and do not meet the definition for hazardous waste. The solid wastes are containerized in 2- or 3- cubic feet cardboard boxes and the aqueous wastes are stored inside 1-gallon plastic jugs that contain absorbent materials. Carcasses, solid wastes, and aqueous wastes may contain minute amounts of radioactivity. The incinerator is operated intermittently according to the amount of waste accumulated, typically two or three days a week every other week, or 4 to 6 days a month.

### **Regulations**

This facility is subject to regulation under the Arkansas Air Pollution Control Code (Regulation 18), effective July 15, 1999, the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation 19), effective February 15, 1999, and 40 CFR Part 60, Subpart Ce, *Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators*.

The following table is a summary of the facility's total emissions.

**USFDA National Center for Toxicological Research**  
**Permit #: 406-IR-1**  
**CSN: 35-0118**

TOTAL ALLOWABLE EMISSIONS		
Pollutant	Emission Rates	
	lb/hr	tpy
PM	13.7	12.3
PM <sub>10</sub>	13.7	12.3
SO <sub>2</sub>	43.6	5.6
VOC	1.5	2.0
CO	21.6	28.7
NO <sub>x</sub>	72.3	96.2

**USFDA National Center for Toxicological Research**  
**Permit #: 406-IR-1**  
**CSN: 35-0118**

### **SECTION III: PERMIT HISTORY**

Permit #406-AI was issued on April 20, 1986. It allowed particulate emissions of 0.1 grains per dry standard cubic foot at 12 percent CO<sub>2</sub> and limited opacity to 5%.

#### SECTION IV: EMISSION UNIT INFORMATION

##### Specific Conditions

- Pursuant to §19.501 et seq of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control, effective February 15, 1999 (Regulation 19) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	lb/hr	tpy
01	Incinerator	PM <sub>10</sub>	10.2	9.7
		SO <sub>2</sub>	0.1	0.1
		VOC	0.1	0.1
		CO	0.5	0.2
		NO <sub>x</sub>	2.2	1.4
02	Boiler #1	PM <sub>10</sub>	3.5	2.6
03	Boiler #2	SO <sub>2</sub>	43.5	5.5
		VOC	1.4	1.9
04	Boiler #3	CO	21.1	28.5
		NO <sub>x</sub>	70.1	94.8

- Pursuant to §18.801 of the Arkansas Air Pollution Control Code, effective February 15, 1999 (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	lb/hr	tpy
01	Incinerator	PM	10.2	9.7
02	Boiler #1	PM	3.5	2.6
03	Boiler #2			
04	Boiler #3			

- Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, visible emissions shall not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

**USFDA National Center for Toxicological Research**  
**Permit #: 406-IR-1**  
**CSN: 35-0118**

SN	Limit	Reg. Citation
01	20%	§19.503
02	5%	§18.501
03		
04		

4. Pursuant to §18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303.
5. Pursuant to §18.901 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne.
6. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not incinerate more than 1,000 pounds of laboratory animal bedding (wood chips) and excreta or more than 3,000 pounds of animal carcasses, solid non-hazardous laboratory wastes, and aqueous non-hazardous laboratory wastes at SN-01 per hour. Only those wastes listed in this condition shall be charged to the incinerator (SN-01).
7. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain daily records which demonstrate compliance with Specific Condition 6. Records shall contain the weight and time of each charge and shall be updated each time the incinerator is charged. These records shall be kept on site, and shall be made available to Department personnel upon request.
8. Pursuant to §18.1104 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the incinerator (SN-01) shall only be operated in accordance with the manufacturer's operating instructions.
9. Pursuant to §19.702 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain a copy of the manufacturer's operating manual/ instructions and a copy of this permit in the immediate vicinity of the incinerator.



**USFDA National Center for Toxicological Research**  
**Permit #: 406-IR-1**  
**CSN: 35-0118**

10. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not allow any waste to be incinerated that is generated off-site.
11. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not allow a particulate rate to exceed 0.1 grains per dry standard cubic foot (corrected to 7% CO<sub>2</sub>) from SN-01.
12. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall test SN-01 for total particulate matter measured by EPA Reference method 5 or 29 in order to demonstrate compliance with Specific Condition 11. Testing shall be performed with the incinerator operating at or above 90% capacity. Testing shall be performed within 90 days of issuance of this permit and a report shall be submitted within 30 days of completion of testing. The report shall be submitted to the Department in accordance with General Condition 6.
13. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the incinerator shall be equipped with a continuous temperature monitor with recorder unit. The temperature at the exit of the secondary combustion chamber shall be maintained at or above 1850 degrees Fahrenheit during operation of the incinerator. This temperature shall be monitored and recorded at all times the incinerator is in operation. These records shall be kept on site and made available to Department personnel upon request.
14. Pursuant to §19.304 of Regulation 19, a state plan of implementation that regulates the performance of hospital/medical/infectious waste incinerators will be implemented at a future date. The plan guidelines are outlined in the *New Source Performance Standards (NSPS)*, 40 CFR 60, Subpart Ce which references Subpart Ec of the same part. Current process information suggests that this facility will be subject to regulation by the forthcoming plan. If applicable, NCTR will be required to submit an application for permit modification that proposes conformity with the plan. More stringent emission limits, additional testing, and other requirements may be imposed.

**USFDA National Center for Toxicological Research**  
**Permit #: 406-IR-1**  
**CSN: 35-0118**

#### **SECTION V: INSIGNIFICANT ACTIVITIES**

The following types of activities or emissions are deemed insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and 19 Appendix A. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated January 15, 1999.

There are no insignificant activities listed in this application.

**SECTION VI: GENERAL CONDITIONS**

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
2. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall not relieve the owner or operator of the equipment and/or the facility from compliance with all applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated thereunder.
3. Pursuant to §19.704 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation 19) and/or A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the Department shall be notified in writing within thirty (30) days after construction has commenced, construction is complete, the equipment and/or facility is first placed in operation, and the equipment and/or facility first reaches the target production rate.
4. Pursuant to §19.410(B) of Regulation 19 and/or §18.309(B) of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, construction or modification must commence within eighteen (18) months from the date of permit issuance.
5. Pursuant to §19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, records must be kept for five years which will enable the Department to determine compliance with the terms of this permit--such as hours of operation, throughput, upset conditions, and continuous monitoring data. The records may be used, at the discretion of the Department, to determine compliance with the conditions of the permit.

**USFDA National Center for Toxicological Research**  
**Permit #: 406-IR-1**  
**CSN: 35-0118**

6. Pursuant to §19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any reports required by any condition contained in this permit shall be certified by a responsible official and submitted to the Department at the address below.

Arkansas Department of Environmental Quality  
Air Division  
ATTN: Compliance Inspector Supervisor  
Post Office Box 8913  
Little Rock, AR 72219

7. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any equipment that is to be tested, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, shall be tested with the following time frames: (1) Equipment to be constructed or modified shall be tested within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source or (2) equipment already operating shall be tested according to the time frames set forth by the Department. The permittee shall notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. Compliance test results shall be submitted to the Department within thirty (30) days after the completed testing.
8. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall provide:
- a. Sampling ports adequate for applicable test methods
  - b. Safe sampling platforms
  - c. Safe access to sampling platforms
  - d. Utilities for sampling and testing equipment
9. Pursuant to §19.303 of Regulation 19 and/or §18.1104 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the equipment, control apparatus and emission monitoring equipment shall be operated within their design limitations and maintained in good condition at all times.

**USFDA National Center for Toxicological Research**  
**Permit #: 406-IR-1**  
**CSN: 35-0118**

10. Pursuant to §19.601 of Regulation 19 and/or §18.1101 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, if the permittee exceeds an emission limit established by this permit, they shall be deemed in violation of said permit and shall be subject to enforcement action. The Department may forego enforcement action for emissions exceeding any limits established by this permit provided the following requirements are met:
  - a. The permittee demonstrates to the satisfaction of the Department that the emissions resulted from an equipment malfunction or upset and are not the result of negligence or improper maintenance, and that all reasonable measures have been taken to immediately minimize or eliminate the excess emissions.
  - b. The permittee reports the occurrence or upset or breakdown of equipment (by telephone, facsimile, or overnight delivery) to the Department by the end of the next business day after the occurrence or the discovery of the occurrence.
  - c. The permittee shall submit to the Department, within five business days after the occurrence or the discovery of the occurrence, a full, written report of such occurrence, including a statement of all known causes and of the scheduling and nature of the actions to be taken to minimize or eliminate future occurrences, including, but not limited to, action to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded, and to reduce the length of time for which said limits are exceeded. If the information is included in the initial report, it need not be submitted again.
11. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall allow representatives of the Department upon the presentation of credentials:
  - a. To enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit
  - b. To have access to and copy any records required to be kept under the terms and conditions of this permit, or the Act
  - c. To inspect any monitoring equipment or monitoring method required in this permit
  - d. To sample any emission of pollutants
  - e. To perform an operation and maintenance inspection of the permitted source

**USFDA National Center for Toxicological Research**  
**Permit #: 406-IR-1**  
**CSN: 35-0118**

12. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit is issued in reliance upon the statements and presentations made in the permit application. The Department has no responsibility for the adequacy or proper functioning of the equipment or control apparatus.
13. Pursuant to §19.410(A) of Regulation 19 and/or §18.309(A) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall be subject to revocation or modification when, in the judgment of the Department, such revocation or modification shall become necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated thereunder.
14. Pursuant to §19.407(B) of Regulation 19 and/or §18.307(B) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit may be transferred. An applicant for a transfer shall submit a written request for transfer of the permit on a form provided by the Department and submit the disclosure statement required by Arkansas Code Annotated §8-1-106 at least thirty (30) days in advance of the proposed transfer date. The permit will be automatically transferred to the new permittee unless the Department denies the request to transfer within thirty (30) days of the receipt of the disclosure statement. A transfer may be denied on the basis of the information revealed in the disclosure statement or other investigation or, if there is deliberate falsification or omission of relevant information.
15. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall be available for inspection on the premises where the control apparatus is located.
16. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit authorizes only those pollutant emitting activities addressed herein.
17. Pursuant to Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit supersedes and voids all previously issued air permits for this facility.

## **APPENDIX A**

## **APPENDIX B**



## **APPENDIX C**

# INVOICE REQUEST FORM

PDS-

Date April 4, 2003

<input checked="" type="checkbox"/>	Air
<input type="checkbox"/>	NPDES
<input type="checkbox"/>	Stormwater
<input type="checkbox"/>	State Permits Branch
<input type="checkbox"/>	Solid Waste

CSN 35-0118

Facility Name USFDA National Center for Toxicological Research

Invoice Mailing Address 3900 NCTR Road

Jefferson, Arkansas 72079

<input type="checkbox"/>	Initial
<input checked="" type="checkbox"/>	Modification
<input type="checkbox"/>	Annual

Permit Number 406-IR-1  
Permit Description Minor Source  
Permit Fee Code A

Amount Due\$ 1777.00

Engineer Wesley Crouch

Paid? ☐No ☐Yes Check #

**Comments: Air Permit Fee Calculation**

$\$18.47 * 96.2 \text{ tpy NO}_x = \$1777.00$

## Public Notice

Pursuant to A.C.A. §8-4-203, and the regulations promulgated thereunder, the Air Division of the Arkansas Department of Environmental Quality gives the following notice:

The United States Food and Drug Administration operates the National Center for Toxicological Research (NCTR) at 3900 NCTR Road in Jefferson, Arkansas 72079 (CSN: 35-0118). This modification to air permit #406-AI will cover previously unpermitted sources and allow this facility to burn liquids (Type 5 waste) in its incinerator.

The application has been reviewed by the staff of the Department and has received the Department's tentative approval subject to the terms of this notice.

Citizens wishing to examine the permit application and staff findings and recommendations may do so by contacting Rhonda Sharp, Information Officer. Citizens desiring technical information concerning the application or permit should contact Wesley Crouch, Engineer. Both Rhonda Sharp and Wesley Crouch can be reached at the Department's central office, 8001 National Drive, Little Rock, Arkansas 72209, telephone: (501) 682-0744.

The draft permit and permit application are available for copying at the above address. A copy of the draft permit has also been placed at the Watson Memorial Library Located at the University of Arkansas at Pine Bluff in Pine Bluff, Arkansas 71601. This information may be reviewed during normal business hours.

Interested or affected persons may also submit written comments or request a hearing on the proposal, or the proposed modification, to the Department at the above address - Attention: Rhonda Sharp. In order to be considered, the comments must be submitted within thirty (30) days of publication of this notice. Although the Department is not proposing to conduct a public hearing, one will be scheduled if significant comments on the permit provisions are received. If a hearing is scheduled, adequate public notice will be given in the newspaper of largest circulation in the county in which the facility in question is, or will be, located.

The Director shall make a final decision to issue or deny this application or to impose special conditions in accordance with Section 2.1 of the Arkansas Pollution Control and Ecology Commission's Administrative Procedures (Regulation #8).

Dated this

Randall Mathis  
Director