

N.C. DEPARTMENT OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES  
 DIVISION OF SOLID WASTE  
 HAZARDOUS WASTE SECTION

Circle one:  
 G, I, P, GW, C, E

FILE DOCKET

DATE	ITEM
21) 6-6-97	Hony. waste mgmt. permit no.
22) 4-2-97	" " " " " "
23) 3-12-98	" " " " " "
24) 3-26-98	Part A of hony. waste permit & RCRA contingency plan
25) 6-4-98	Record of communication
26) 7-6-98	Class I permit modification
27) 7-19-99	meeting Attendance Record
28) 1-5-00	permit modification Request
29) 2-2-00	Part B Application
30) 3-6-00	First Notice of Deficiency
31) 4-17-00	Meeting Attendance Record
32) 5-4-00	class I permit modification
33) 7-14-00	Second Notice of Deficiency
34) 8-4-00	Response to the 2nd notice of deficiency
35) 8-7-00	Building 103 closure certification
36) 9-11-00	Request for Building 108 Expansion
37) 10-17-00	washing of Incinerator # pl #2
38) 11-1-00	Request for Temporary Authorization

HAZARDOUS WASTE SECTION (Review 8/93)

G- General, I- Inspections  
 P- Permits, GW- Ground Water  
 C- Closure E- Enforcement



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

NC 2 750 890 004 (P)

November 1, 2000

National Institutes of Health  
National Institute of  
Environmental Health Sciences  
P.O. Box 12233  
Research Triangle Park, N.C. 27709

Ms. Jill E. Burton  
Hazardous Waste Section  
NCDENR  
401 Oberlin Rd. Suite 150  
Raleigh, NC 27699-1646

Reference: Notification of Request for Temporary Authorization  
Dioxin storage past one year permit limit  
NIEHS - NC2750890004

(38)



Dear Ms. Burton:

In accordance with 40 CFR 270.42(e) the National Institute of Environmental Health Sciences (NIEHS) has requested a temporary authorization to store Dioxin and dioxin-related material past the one year storage limit granted under permit number NC2750890004. The NIEHS currently has two drums of radioactive mixed dioxin waste and one drum of chemical dioxin waste stored in the Building 108 Waste Handling Facility. All of the materials are from research projects. Attempts to locate suitable disposal outlets for the materials have produced the following results:

- 1) No outlet exists for radioactive mixed dioxin waste.
- 2) The only outlet in the U.S.A. permitted to dispose of non-radioactive dioxin waste is not currently accepting dioxin waste for disposal.
- 3) One out-of-the-country option was offered to NIEHS by one of our waste disposal contractors. The contractor proposed sending the chemical dioxin waste material to a Canadian processing facility (CRI Environment, Inc.) in Coteau-du-Lac, Quebec. The material would be consolidated with other dioxin waste materials and then shipped for land disposal at a Canadian Safety-Kleen owned secure landfill. The NIEHS does not wish to use this method of disposal because landfill is not the recommended best demonstrated available technology for disposal of dioxin waste in the U.S.A..

The NIEHS will perform the following activities during the temporary authorization:

- 1) maintain a complete list of radioactive mixed and chemical dioxin and dioxin-related material stored on site;
- 2) minimize to the extent possible the production of dioxin waste materials;
- 3) document, at least annually, ongoing efforts to locate disposal options for this material.

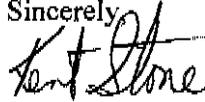
Additionally, in the permit renewal application submitted by the NIEHS on May 3, 1999 we have requested that the permit allow storage of certain radioactive mixed wastes for periods longer than one year. I have revised the pages to include the non-radioactive dioxin and dioxin-related waste materials in the request.

Page 2 - Notification of Temporary Authorization Request

In accordance with 40 CFR 270.42 (e)(2)(iii), the NIEHS is sending notification of the temporary authorization request to all persons on the facility mailing list.

Please contact me at (919) 541-7713 if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Kent Stone". The signature is written in a cursive style with a large, stylized "K" and "S".

Kent Stone

NIEHS Hazardous Waste Manager

cc: Scott Merkle, NIEHS

(P)

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
DIVISION OF WASTE MANAGEMENT

October 17, 2000

(37)



JAMES B. HUNT JR.  
GOVERNOR

BILL HOLMAN  
SECRETARY

WILLIAM L. MEYER  
DIRECTOR

Mr. Kent Stone  
National Institute of Environmental Health Sciences  
P.O. Box 12233  
Research Triangle Park, North Carolina 27709

Re: Washing of Incinerator Number PI # 2  
EPA ID # NC2 750 890 004

Dear Mr. Stone:

This letter acknowledges receipt on July 20, 2000 of your report concerning the closure of incinerator number PI #2 in building 106. The analysis presented in the report shows that the rinse water still contains hazardous constituents. The incinerator will be determined to be clean closed ONLY when analysis of the final rinse water shows non-detect for all constituents of concern. Section 40 CFR 264.351, adopted by reference at 15A NCAC 13A .0109 requires that all hazardous waste and hazardous waste residue be removed from the incinerator. NIEHS must decontaminate the incinerator such that an analysis of the rinse water shows non-detect for all constituents of concern and submit the results to this office.

If you have any questions or wish to discuss this issue in a meeting, please contact me at 733-2178, extension 224.

Sincerely,

*Lebeed Kady*

Lebeed Kady  
Facility Management Branch  
Hazardous Waste Section

cc: Mr. Narindar Kumar, Chief, US EPA, Region IV  
Phillip Orozco  
Lebeed Kady

Kathleen Z. Lawson *KZL*  
Pete Doorn *P*

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401 OBERLIN ROAD, SUITE 150, RALEIGH, NC 27605  
PHONE 919-733-4996 FAX 919-715-3605

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DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

NC 2750 890 004  
P

September 11, 2000

National Institutes of Health  
National Institute of  
Environmental Health Sciences  
P.O. Box 12233  
Research Triangle Park, N.C. 27709

Ms. Jill E. Burton  
Hazardous Waste Section  
MSC# 1646  
North Carolina Department of Environment  
and Natural Resources  
401 Oberlin Rd. Suite 150  
Raleigh, North Carolina 27699-1646

736



Reference: Notification of Request for Temporary Authorization to Construct  
Building 108 Expansion  
NIEHS/EPA - NC2750890004

Dear Ms. Burton:

In accordance with 40 CFR 270.42(e) the National Institute of Environmental Health Sciences (NIEHS) and Environmental Protection Agency (EPA) has requested a 180 day temporary authorization to construct the EPA expansion portion of the Building 108 NIEHS/EPA Waste Handling Facility under permit number NC2750890004. The following activities will be performed during the temporary authorization:

- 1) Construction of a 1263 ft<sup>2</sup> addition that includes office/record storage, vestibule and packed waste storage;
- 2) Expansion of existing communication, security, electrical, HVAC, fire suppression, and emergency notification systems;
- 3) Existing NIEHS portion of Building 108 will continue to operate during the expansion project.

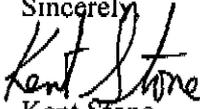
The NIEHS and EPA submitted a renewal Part B permit application to the North Carolina Hazardous Waste Section on May 3, 1999 and responses to two notices of deficiencies. The response to the final notice of deficiency that completed the NIEHS/EPA permit application was delivered on August 7, 2000. All of the construction drawings, building specifications and permit application narrative for the expansion project have been submitted to the North Carolina Hazardous Waste Section as part of the permit renewal application.

The contract to construct the Building 108 expansion project was awarded to Cooper Construction Company on July 14, 2000. The contractor has submitted a construction schedule that shows physical construction will commence on September 18, 2000. At this time the new hazardous waste permit has not been received, therefore, the NIEHS and EPA are requesting a temporary authorization to allow the contractor to begin construction as indicated on their schedule.

Page 2 - Notification of Temporary Authorization Request

In accordance with 40 CFR 270.42 (e)(2)(iii), the NIEHS and EPA are sending notification of the temporary authorization request to all persons on the facility mailing list.

Please contact me at (919) 541-7713 if you have any questions.

Sincerely,  
  
Kent Stone

NIEHS Hazardous Waste Manager

cc: Scott Merkle, NIEHS  
Cara Lucas, EPA

  
**NORTH CAROLINA DEPARTMENT OF  
ENVIRONMENT AND NATURAL RESOURCES**  
**DIVISION OF WASTE MANAGEMENT**

August 7, 2000

(35)

Mr. Kent Stone  
National Institute of Environmental Health Sciences  
P.O.Box 12233  
Research Triangle Park, North Carolina 27709

Re: Building 103 Closure Certification  
EPA ID # NC2 750 890 004

Dear Mr. Stone:

The Hazardous Waste Section (Section) received the certification from the independent professional engineer and the owner/operator on January 26, 1999 that closure activities for the building 103 were completed according to the approved closure plan. The additional Appendix IX analysis on the spent wash fluid performed by NIEHS, at the request of the Section, showed that the referenced unit was decontaminated. Additionally, Phillip Orozco of the Section conducted a closure inspection on July 25, 2000, and found the facility to be in compliance with the approved closure plan.

Your certification of final closure for the facility is accepted. A copy of this letter will be forwarded to our Financial Unit. They will address details concerning financial assurance for closure under a separate letter.

If you have any questions, please contact Lebeed Kady at (919) 733-2178 extension 224.

Sincerely,

*Kathleen Z. Lawson*

Kathleen Z. Lawson, Unit Supervisor  
Facility Management Branch  
Hazardous Waste Section

cc: Narindar Kumar, US EPA, Region IV  
Douglas Holyfield  
Larry Perry  
Jenny Lopp  
Phillip Orozco  
Lebeed Kady

cc:

Peter L. Doorn *PD*  
Kathleen Z. Lawson *KZ*

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DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

August 4, 2000

National Institutes of Health  
National Institute of  
Environmental Health Sciences  
P.O. Box 12233  
Research Triangle Park, N.C. 27709

Mr. Lebeed Kady  
Hazardous Waste Section  
Division of Waste Management  
North Carolina Department of Environment  
and Natural Resources  
P.O. Box 27687  
Raleigh, North Carolina 27611-7687



Dear Mr. Kady:

Please find enclosed the National Institute of Environmental Health Sciences (NIEHS) and Environmental Protection Agency (EPA) response to the Second Notice of Deficiency on the NIEHS/EPA Part B Application (NC2750890004), including eight copies of an addendum addressing the noted deficiencies. The following documents and revised sections of the Hazardous Waste Management Permit Application are included in the addendum:

NIEHS/EPA Response to the Second Notice of Deficiency;

Part B Permit Application -

Table of Contents, revised page i;

Section B, revised pages B-6 through B-14 (added Table B-1), Exhibit B-1  
Map 1, Exhibit B-4;

Section CC, revised page CC-1

Please contact me at 541-7713 if there are any questions or additional information that would help in your evaluation of our response to the Second Notice of Deficiency.

Sincerely,

Kent E. Stone

NIEHS Hazardous Waste Manager

Enclosures

cc w/ encl.: Scott E. Merkle, NIEHS  
Cara B. Lucas, EPA

**NIEHS & EPA RESPONSE TO THE SECOND NOTICE OF DEFICIENCY  
PART B APPLICATION -- HAZARDOUS WASTE MANAGEMENT PERMIT  
NC2 750 890 004**

**NIEHS & EPA WASTE HANDLING FACILITY**

**NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
RESEARCH TRIANGLE PARK, NORTH CAROLINA 27709**

**AUGUST 4, 2000**

**PART B - FACILITY DESCRIPTION**

1. Location of Hazardous Waste Units. Exhibits B-1 (Map 1) and B-4 have been re-labeled to depict the location of the NIEHS Solid Waste Management Units (SWMU) and the NIEHS/EPA Hazardous Waste Units. Additional explanatory text has been added to Section B-2, pages B-6 and B-7 to describe the origin of the SWMU designation for the NIEHS units. Table B-1 presents the current status of the NIEHS Solid Waste Management Units.

The definition of a Solid Waste Management Unit, as provided by Mr. L. Kady in the Second NOD List of Deficiencies, is "an area which has become contaminated by routine and systematic releases of hazardous waste or hazardous constituents." The NIEHS Solid Waste Management Units do not meet this definition. None of the NIEHS SWMUs have ever been contaminated by a release of hazardous waste or hazardous constituents. However, according to information received from the NC Hazardous Waste Section the "SWMU - no further action" designation must remain in the NIEHS/EPA Hazardous Waste Management Permit Application.

**SUBPART CC - AIR EMISSION STANDARDS FOR TANKS, SUBSURFACE  
IMPOUNDMENTS, AND CONTAINERS**

2. Applicability. The CFR reference on page CC-1 has been corrected. The reference is for 40 CFR 264.1086 for containers standards.



NORTH CAROLINA DEPARTMENT OF  
ENVIRONMENT AND NATURAL RESOURCES  
DIVISION OF WASTE MANAGEMENT

JAMES B. HUNT JR.  
GOVERNOR

July 14, 2000

BILL HOLMAN  
SECRETARY

WILLIAM LAMMEYER  
DIRECTOR

Mr. Kent Stone  
NIEHS & EPA Waste Handling Facility  
P. O. Box 12233  
Research Triangle Park, North Carolina 27709-2233

(33)

Re: Part B Application -- Hazardous Waste Management Permit  
Second Notice of Deficiency  
Facility ID #: NC2 750 890 004

Dear Mr. Stone:

A review has been completed on your Part B Application Addendum received March 8, 2000. The attached Notice of Deficiency identifies specific deficiencies that must be corrected before the application can be determined complete. Eight (8) copies of an addendum addressing these deficiencies must be submitted by August 7, 2000. Failure to submit these addenda on or before the compliance date can result in enforcement actions or a decision to deny the permit.

If you have any questions or need clarification of any item on the attached list, please contact me at (919) 733-2178 extension 224.

Sincerely,

Lebeed Kady  
Facility Management Branch  
Hazardous Waste Section

Enclosures

cc: Narindar Kumar, US EPA, Region IV  
Phillip Orozco  
Lebeed Kady

rc: Kathleen Z. Lawson *KZL*  
Pete Doorn *PD*

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List of Deficiencies  
NIEHS & EPA Waste Handling Facility  
Research Triangle Park, North Carolina  
NC2 750 890 004

PART B - FACILITY DESCRIPTION

[40 CFR 270 as adopted in 15A NCAC 13A .0113]

B-2 Topographic Map  
B-2a General Requirements

1. Location of Hazardous Waste Units

In labeling your hazardous waste units on exhibits B-1 and B-2 you identified the following Solid Waste Management Units (SWMU): Building 108 as SWMU 10; building 106 as SWMUs 3, 4, and 8; Area 1 as SWMU 11, and Area 6 as SWMU 12.

A Solid Waste Management Unit is defined as an area which has become contaminated by routine and systematic releases of hazardous waste or hazardous constituents. This definition does not include accidental spills from production areas and units in which wastes have not been managed or which have been adequately remediated (all hazardous waste or hazardous constituents have been removed from the contaminated environmental media or to levels protective to human health and the environment (risk based levels)).

Thus, if these management or storage areas does not satisfy the definition of a SWMU, then such designation need to be changed in exhibits B-1 and B-2.

[40 CFR 270.14(b)(19)(xii)]

SUBPART CC - AIR EMISSION STANDARDS FOR TANKS, SUBSURFACE IMPOUNDMENTS, AND CONTAINERS

[40 CFR 264 as adopted in 15A NCAC 13A .0109]

CC-1 Air Emission Standards  
CC-1a Applicability

2. On page CC-1 you stated that "the NIEHS and EPA shall meet applicable requirements for container storage as defined in 264.1087."

Note that the 40 CFR 264.1087 are standards for closed-vent systems and control devices, which the NIEHS & EPA facility does not have. Please clarify this issue or change the referencing to 40 CFR 264.1086 for containers standards.

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NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
DIVISION OF WASTE MANAGEMENT

(P)

May 4, 2000

(32)

JAMES B. HUNT JR.  
GOVERNOR

BILL HOLMAN  
SECRETARY

WILLIAM L. MEYER  
DIRECTOR

Mr. Kent Stone  
National Institute of Environmental Health Sciences  
P.O.Box 12233  
Research Triangle Park, North Carolina 27709

Reference: Class One Permit Modification  
NIEHS  
NC2 750 890 004

Dear Mr. Stone:

This acknowledges receipt of your request dated January 5, 2000 for permit modification. The modification request changes the closure procedures for the hazardous waste incinerator. NIEHS with this modification should be able to perform the decontamination and RCRA closure of the incinerator, with the option of retaining the unit for service as a pathological incinerator upon certification of RCRA closure and acceptance by the Hazardous Waste Section.

This modification has been processed as a Class One (1) permit modification under 40 CFR 270.42 as adopted in 15A NCAC 13A .0113. To comply with 40 CFR 270.42 you must notify all persons on the enclosed mailing list with the exception of the State and EPA who have already been notified. Please replace pages I-2, I-3, I-4, I-5, I-11, and I-12 of the application with the enclosed pages.

Approval of this modification is therefore granted and has been incorporated into your permit. If you have any questions, please contact Lebeed Kady at (919) 733-2178 extension 224.

Sincerely,

*Kathleen Z. Lawson /for*

Jill Burton, Acting Chief  
Hazardous Waste Section

Enclosures



Narindar Kumar, US EPA, Region IV  
Mr. David F. Thompson, Durham County Manager  
Phillip Orozco  
Lebeed Kady



Kathleen Z. Lawson *KZL*  
Pete Doorn *PD*  
Katherine O'Neal *KLO*

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THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
DIVISION OF WASTE MANAGEMENT  
HAZARDOUS WASTE SECTION

(P)

MEETING ATTENDANCE RECORD

Facility NIEHS & EPA  
EPA ID NC 2 750 890 004  
Date 4/17/00

(31)

Please complete the information requested below. Copies will be made available after the meeting

Attending:	Representing:	Phone Number:
1. <u>Lebreed Kady</u>	<u>NC Haz. Waste.</u>	<u>919-733-2178 X224</u>
2. <u>Carci Lucas</u>	<u>U.S. EPA</u>	<u>919-541-1086</u>
3. <u>Kent Stone</u>	<u>NIEHS</u>	<u>919-541-7713</u>
4. <u>Scott E. Markle</u>	<u>NIEHS</u>	<u>919-541-7933</u>
5. <u>Kathy Lawson</u>	<u>NC Haz. Waste.</u>	<u>919-733-2178 x 229</u>
6. _____	_____	_____
7. _____	_____	_____
8. <u>Meeting discussed the following issues.</u>	_____	_____
9. <u>1) Temporary authorization of Bldg 108</u>	_____	_____
10. <u>2) Closure process of Bldg 103</u>	_____	_____
11. <u>3) RD&amp;D permit coming into new location</u>	_____	_____
12. _____	_____	_____
13. _____	_____	_____
14. _____	_____	_____



DEPARTMENT OF HEALTH & HUMAN SERVICES

NC2 750 890 004 (P)  
NIEHS (& EPA)

Public Health Service

March 6, 2000

National Institutes of Health  
National Institute of  
Environmental Health Sciences  
P.O. Box 12233  
Research Triangle Park, N.C. 27709

Mr. Lebeed Kady  
Hazardous Waste Section  
Division of Waste Management  
North Carolina Department of Environment  
and Natural Resources  
P.O. Box 27687  
Raleigh, North Carolina 27611-7687



Dear Mr. Kady:

Please find enclosed the National Institute of Environmental Health Sciences (NIEHS) and Environmental Protection Agency (EPA) response to the First Notice of Deficiency on the NIEHS/EPA Part B Application (NC2750890004), including eight copies of an addendum addressing the noted deficiencies. The following documents and revised sections of the Hazardous Waste Management Permit Application are included in the addendum:

NIEHS/EPA Response to the First Notice of Deficiency;

Part A Permit Application, facility photographs;

Part B Permit Application -

Table of Contents, in its entirety;

Section B, revised pages B-5 through B-14, and Exhibit B-1 Map 1 (added key), Exhibit B-1 Map 2 (new), Exhibit B-2 Map 2 (new);

Section D, revised pages D-22 through D-39 and Exhibit D-4;

Section F, revised pages F-7, F-15 through F-25 and Exhibit F-1 and F-2;

Section I, in its entirety;

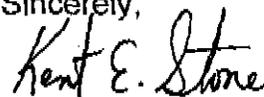
Section G, revised pages G-16 through G-17 and Exhibits G-2a, G-2b, G-2c, G-2d;

Appendix I - Primary and Secondary Evacuation Routes;

Page 2 - Mr. Lebeed Kady

Please contact me at 541-7713 if there are any questions or additional information that would help in your evaluation of our response to the First Notice of Deficiency.

Sincerely,

A handwritten signature in black ink that reads "Kent E. Stone". The signature is written in a cursive style with a large, prominent "K" and "S".

Kent E. Stone  
NIEHS Hazardous Waste Manager

Enclosures

cc w/ encl.: Scott E. Merkle, NIEHS  
Cara B. Lucas, EPA

**NIEHS & EPA RESPONSE TO THE FIRST NOTICE OF DEFICIENCY  
PART B APPLICATION -- HAZARDOUS WASTE MANAGEMENT PERMIT  
NC2 750 890 004**

**NIEHS & EPA WASTE HANDLING FACILITY**

**NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
RESEARCH TRIANGLE PARK, NORTH CAROLINA 27709**

**MARCH 1, 2000**

**PART A - APPLICATION**

1. Legal Boundaries of the Facility. A legend has been added to Exhibit B-1 Map 1 defining the legal boundaries of the facility site. The bold line indicates the legal property boundary and the dashed lines shows a 1,000 foot distance from the facility boundary.
2. Facility Photograph. Dates have been indicated on the back of each photograph. Additional photographs have been included showing the exterior of EPA Areas 1 and 6 in their current state of construction (as of Feb. 17, 2000).

**PART B - FACILITY DESCRIPTION**

3. Location of Access Control. A map has been added as part of Exhibit B-1 depicting EPA Areas 1 & 6. This map (Map 2 in Exhibit B-1) shows fences and gates at access roadways onto the site, loading and unloading areas at Areas 1 and 6, and internal roadways. The movement of waste materials between the NIEHS and EPA research buildings and Building 108 occurs entirely on internal site roadways. No public roadways are used in the transfer of material to Building 108.
4. Storm, sanitary and process sewers. A map (Exhibit B-2, Map 2) has been added as part of Exhibit B-2 to depict the sewers and surface features for EPA Areas 1 and 6.
5. Loading and unloading areas. See response for item 3.
6. Location of Hazardous Waste Units. The maps comprising Exhibits B-1 and B-2 have been labeled to show the locations of Building 108 and EPA Areas 1 and 6.
7. Access and Internal Roads. See response for item 3.

8. Traffic Information; Estimate volume. Additional explanatory text has been added to Section B-3 at page B-11 of the application to describe the movement and volume of vehicles transporting hazardous waste between buildings on the facility site.

#### **PART D - PROCESS INFORMATION**

9. Capacity of the Containment System Relative to the Number and Volume of Containers to be Stored. The polyethylene modular spill decks described in the Part-B application are commercially available products. Figures D-3 and D-4 have been added to Part D. These figures show the product information (dimensions and capacity ratings) for the products used by NIEHS and EPA. The spill decks used in Building 108 and EPA Areas 1 and 6 are from the same manufacturer, but are different products. Also, the physical dimensions for the spill deck described on page D-22 of the application have been corrected.
10. See response for item 9.
11. See response for item 9.
12. The maximum number, height, volume and stacking procedures of containers in storage area. The text on pages D-32 and D-33 has been amended to provide specific information on the maximum number and size of containers stored within Building 108. The practices for acceptable stacking of containers has been clarified. Fifty-five gallon drums are not stacked on another container. The description of the maximum number of containers corresponds with the information provided in Table 7, Exhibit D-2.
13. Machinery, equipment, procedures used to move containers. Additional information has been added to the description of container handling procedures on pages D-35 and D-36. The following container handling equipment are listed: pallet jack, drum dolly, drum lifter/rotator, and cart.

#### **PART F - PROCEDURES TO PREVENT HAZARDS**

14. Barrier. Pages F-1 through F-3 describe the measures used to ensure the security and access control of hazardous waste units. These measures include access barriers at the roadway entrances to the facility site, 24-hour surveillance by on-site security guards (who make regular watch tours to the hazardous waste facilities), video-camera surveillance at multiple locations throughout the site, and access controls (card key locks) on all entrance doors to the hazardous

waste units which are continuously monitored by a computerized security system. The hazardous waste units described in the permit application (Building 108, and EPA Areas 1 and 6) are within totally enclosed buildings with around-the-clock security. However, there is no fence or barrier surrounding these buildings. The regulations at 40 CFR 264.14(b) require that security of the active portion of the hazardous waste unit be provided *either* by a 24-hour surveillance system (e.g., monitoring by television or guards) *or* by physical barriers around the facility. It is our interpretation that the requirements of 264.14(b)(1) have been met.

15. Emergency Equipment. Page F-7 and Exhibits F-1 and F-2 of the permit application have been modified by adding detectors/sensors to the list of fire protection equipment that is regularly inspected.
16. Aisle space Requirements. The figures in Exhibit D-4 have been modified to show that the minimum 30 inch aisle spacing is maintained between containers. The text on pages F-15 and F-16 has been changed to refer to the figures in Exhibit D-4.

#### **PART G - CONTINGENCY PLAN**

17. Evacuation Plan. Exhibit G-2 has been amended to show and distinguish primary and alternate (secondary) evacuation routes for Building 108 and EPA Areas 1 and 6. These changes have also been incorporated into the Contingency Plans provided in Appendix I. For Building 108, primary evacuation routes are depicted on Exhibit G-2a and secondary routes are depicted on Exhibit G-2b. Evacuation routes (primary and secondary) for EPA Area 1 are shown on Exhibit G-2c and evacuation routes for Area 6 are shown on Exhibit G-2d.

#### **PART H - PERSONNEL TRAINING**

18. Training Content. The discrepancy in the listed hours of CPR/First Aid training between NIEHS and EPA personnel reflects a difference in the training content and instruction in First Aid. NIEHS personnel are trained to a level of emergency first responder which involves 40 hours of instruction every three years and 8 hours of instruction on CPR techniques annually. EPA personnel are trained in CPR techniques (8 hours annually).

#### **PART I - CLOSURE PLANS, POST-CLOSURE PLANS, AND FINANCIAL REQUIREMENTS**

19. Closure Time Allowed for closure. The statement that closure activities will be completed within 180 days has been added to the text on page I-2. This statement can also be found on page I-6 of the permit application.
20. Certification of closure. The text on page I-2 has been clarified to state that the certification of closure will be submitted within 60 days of completion of final closure.
21. Air Emission Standards. On page D-37 and D-38 of the permit application, a statement has been added that the NIEHS and EPA will comply with the applicable requirements of Subpart BB and CC. It is our interpretation that the types of equipment covered by Subpart BB are not used by NIEHS or EPA in Building 108 or Areas 1 and 6 (e.g., pumps, compressors, liquid/gas/vapor valves containing hazardous waste).
22. Verification and decontamination. The description of the sampling and analysis procedures to verify decontamination and closure of Building 108 and EPA Areas 1 and 6 has been clarified on page I-7 of the application. The general approach for ensuring facilities are free from any residual contamination will be to triple clean surfaces with steam or high pressure hot water. The spent wash water from the initial two decontamination washes will be collected and analyzed for hazardous waste characteristics. The spent wash water from the third verification wash will be separately collected and analyzed for hazardous waste characteristics and the chemicals in the ground-water monitoring list (appendix IX to 40 CFR Part 264). Where feasible and appropriate, surface swipe samples will also be collected to verify the effectiveness of the decontamination washes and to pinpoint areas where additional cleaning may be necessary.
23. Closure of Incinerators. NIEHS has requested and received verbal approval by Mr. L. Kady to amend the existing closure plan for the incinerator to reflect that the unit will not be dismantled. The decontamination and rinsate sampling activities under the amended closure plan have been completed. Submittal of the closure report and certification is pending completion of the sample analyses.

#### **SUBPART CC - AIR EMISSION STANDARDS FOR TANKS, SUBSURFACE IMPOUNDMENTS, AND CONTAINERS**

24. Containers. A new section has been added to the Part B permit application on the procedures used by the NIEHS and EPA in meeting the air emission standards for containers according to the requirements in 40 CFR 264.1080 through 264.1090. Two sizes of containers used by NIEHS/EPA require adherence to Container Level 1 standards -- 55 gallon drum (0.21 m<sup>3</sup>) and 30 gallon drum (0.11 m<sup>3</sup>). The emission controls described in Part CC of the

application include the use of drums meeting U.S. Department of Transportation regulations, maintaining covers and closure devices on all containers except when transferring material into and from the container, and frequent inspections to detect container defects.



NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
DIVISION OF WASTE MANAGEMENT

February 2, 2000

(29)

Mr. Kent Stone  
NIEHS & EPA Waste Handling Facility  
P. O. Box 12233  
Research Triangle Park, North Carolina 27709-2233

Re: Part B Application -- Hazardous Waste Management Permit  
First Notice of Deficiency  
Facility ID #: NC2 750 890 004

Dear Mr. Stone:

An initial review has been performed on your Part B Application. The attached Notice of Deficiency identifies specific deficiencies that must be corrected before the application can be determined complete. Eight (8) copies of an addendum addressing these deficiencies must be submitted by March 2, 2000. Failure to submit these addenda on or before the compliance date can result in enforcement actions or a decision to deny the permit.

If you have questions or need clarification of any item on the attached list, please contact me at (919) 733-2178 extension 224.

Sincerely,

*Lebeed Kady*

Lebeed Kady  
Facility Management Branch  
Hazardous Waste Section

Enclosures

cc: Narindar Kumar, US EPA, Region IV  
Phillip Orozco  
Lebeed Kady

Kathleen Z. Lawson *KZL*  
Pete Doorn *PD*

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1646 MAIL SERVICE CENTER, RALEIGH, NORTH CAROLINA 27699-1646  
401 OBERLIN ROAD, SUITE 150, RALEIGH, NC 27605  
PHONE 919-733-4996 FAX 919-715-3605



List of Deficiencies  
NIEHS & EPA Waste Handling Facility  
Research Triangle Park, North Carolina  
NC2 750 890 004

**PART A - APPLICATION**

~~[40 CFR 270 as adopted in 15A NCAC 13A .0113]~~

XV Map

1. Legal Boundaries of the facility

Place a key to identify items on the map. Identify what the bold and dashes line represent on the map.

[40 CFR 270.14(b)(19)(vii)]

XVII Facility Photograph

2. The date each photograph

The date of each photograph taken is not provided. Photographs of all existing or future storage or treatment units must be provided. Indicate the date the photograph was taken on the back of each photograph.

[40 CFR 270.13(1), Part A Instructions]

**PART B - FACILITY DESCRIPTION**

~~[40 CFR 270 as adopted in 15A NCAC 13A .0113]~~

B-2 Topographic Map

B-2a General Requirements

3. Location of Access Control

The access control (fences and gates) to EPA Areas 1 and 6 are not depicted on either exhibit B-1 or B-2. Provide a map that shows the location of access control.

[40 CFR 270.14(b)(19)(viii)]

4. Storm, sanitary and process sewers

The storm, sanitary and process sewers to EPA Areas 1 and 6 are not depicted on either exhibit B-1 or B-2. Provide a map that shows the storm, sanitary and process sewers.

[40 CFR 270.14(b)(19)(x)]

5. Loading and unloading areas

The loading or unloading areas to EPA Areas 1 and 6 are not depicted on either exhibit B-1 or B-2. Provide a copy of the map which shows the loading and unloading areas.

[40 CFR 270.14(b)(19)(x)]

6. Location of Hazardous Waste Units  
Label all of your hazardous waste units on exhibits B-1 and B-2.  
[40 CFR 270.14(b)(19)(xii)]
7. Access and Internal Roads  
The internal roads for EPA Areas 1 and 6 are not shown on either exhibit B-1 or B-2.  
Provide a copy of the map which shows the internal roads.  
[40 CFR 270.14(b)(19)(x)]

B-3 Traffic Information

8. Estimate volume  
Describe the movement of waste on the facility. The description must include the estimate volume of vehicles transporting hazardous waste.  
[40 CFR 270.14(b)(10)]

**PART D - PROCESS INFORMATION**

[40 CFR 264 as adopted in 15A NCAC 13A .0109]

[40 CFR 270 as adopted in 15A NCAC 13A .0113]

D-1a(3) Capacity of the Containment System Relative to the Number and Volume of Containers to be stored

9. On page D-22 ~~the freezer compartment has a polyethylene modular spill deck with dimensions of 49.5"L x 24.75"W x 5.75"H. Provide drawings and calculations that support your 22-gallon spill containment capacity.~~  
[Editing Comment]
10. Page D-25 states that the two spill decks in the bulking room, with bladders and dimensions of 49.5"L x 29.25"W x 5.75"H, provide 144-gallons of spill containment capacity. Provide drawings and calculations that support your 144-gallon volume.  
[Editing Comment]
11. The spill decks noted on items 1 and 2 above have different width dimensions. Please indicate whether they are two different types of spill decks, or correct these numbers on page D-22 and D-25 if they are in error.  
[Editing Comment]

D-1c Container Management Practices

12. The maximum number, height, volume and stacking procedures of containers in storage area

On Page D-32 you stated that you will store "approximately 183 55-gallon drums with a total estimated capacity of 14,381 gallons. Twenty-gallon fiber drums and five-gallon plastic drums may also be stacked a maximum of two drums high. Twenty-gallon fiber drums may also be stacked on top of 55-gallon drums) (only one 20-gallon fiber drum on each 55-gallon drum). Large containers are normally not stacked."

When calculating for the maximum number, height, volume and stacking procedures do not use words such as approximately, estimate, may and normally. Be very specific as to how the three different size drums (55, 20 and 5-gallon) can be stacked on top of each other to achieve the maximum capacity of the containers in the storage area. Also, clarify what you mean by large containers are normally not stacked.

[40 CFR 270.15(a)(3) and 264.175(b)(3)]

13. Machinery, equipment, procedures used to move containers

Specify what machinery, equipment, and procedures are used to move containers in the container storage area.

[40 CFR 264.173(b)]

**PART F - PROCEDURES TO PREVENT HAZARDS**

~~[40 CFR 264 as adopted in 15A NCAC 13A .0109]~~

~~[40 CFR 270 as adopted in 15A NCAC 13A .0113]~~

F-1a(2)(a) Barrier

14. The barrier intended in the requirements is for the areas where hazardous waste is treated or stored, not the entire campus. Describe the barrier surrounding building 108 and Areas 1 and 6.

[40 CFR 264.14(b)(2)(i)]

F-2b Facility Inspection Requirements

F-2b(2) Emergency Equipment

15. All fire detection equipment need to be inspected. Include the photo-electric smoke detectors on the inspection list on page F-7 and in Exhibit F-1 and F-2.

[40 CFR 264.15(a)]

F-3b Aisle space Requirements

16. Page F-15 references Exhibit F-3 when describing a 30-inch aisle space between containers. The aisle space is not demonstrated in Exhibit F-3.

[Editing Comment]

**PART G - CONTINGENCY PLAN**

~~[40 CFR 264 as adopted in 15A NCAC 13A .0109]~~

~~[40 CFR 270 as adopted in 15A NCAC 13A .0113]~~

G-7 Evacuation Plan

17. Primary and alternate evacuation routes for building 108, Areas 1 and 6 are not clear. Exhibit G-2 and the drawing in Appendix I do not show any distinction between these two routes. Arrows need to clearly be distinguishable to show the difference.  
[40 CFR 264.52(f)]

**PART H - PERSONNEL TRAINING**

~~[40 CFR 264 as adopted in 15A NCAC 13A .0109]~~

~~[40 CFR 270 as adopted in 15A NCAC 13A .0113]~~

H-3(a) Training Content

18. Page H-3 states that NIEHS provides 8-40 hours of CPR/First Aid training semi-annually, while EPA provides 4-8 hours annually. Is there a discrepancy in the number of hours of training?  
[40 CFR 264.16]

**PART I - CLOSURE PLANS, POST-CLOSURE PLANS, AND FINANCIAL REQUIREMENTS**

~~[40 CFR 264 as adopted in 15A NCAC 13A .0109]~~

~~[40 CFR 270 as adopted in 15A NCAC 13A .0113]~~

I-1a Closure Plans

19. Closure Time Allowed for closure

State that the owner/operator will complete partial and final closure activities in accordance with the approved plan within 180 days after receiving the final volume of hazardous waste.  
[40 CFR 264.113(b)]

20. Certification of closure

State that within 60 days of completion of final closure the owner/operator will submit to the state a certification by a registered professional engineer that the unit(s) was closed according to the closure plan.  
[40 CFR 264.115]

21. Air Emission Standards  
All hazardous waste or hazardous constituents placed in containers or tanks for closure should comply with the requirements of Subpart-CC and Subpart-BB when applicable. Include this statement in the application.  
[40 CFR 264.179]

I-1e(3) Closure of Containers

22. Verification and decontamination  
Swipe samples are not recommended for verification due to inherent problems with the method and sample analysis. The Section strongly recommends the use rinsate sampling instead for decontamination purposes. The samples must be tested for all characteristic and listed hazardous waste stored in the units. For rinsate samples, decontamination is complete when all hazardous constituents analyzed for are non-detect.

I-1e(7) Closure of Incinerators

23. The incinerator has not been included in the permit application. NIEHS has previously indicated that the incinerator will be closed and that the incinerator will not be dismantled as indicated in the currently approved closure plan. The closure plan in the currently approved permit application must be modified to indicate that the incinerator will not be dismantled. If the facility fails to modify the closure plan, then the incinerator must be dismantled. If closure of the incinerator is not commenced, the renewal application needs to be amended to include the hazardous waste incinerator.  
[40 CFR 264.351]

**SUBPART CC - AIR EMISSION STANDARDS FOR TANKS, SUBSURFACE  
IMPOUNDMENTS, AND CONTAINERS**  
[40 CFR 264 as adopted in 15A NCAC 13A .0109]

CC-3 Containers

24. All hazardous waste placed in containers must be managed in accordance with the requirements of Subpart CC unless the facility is exempt under 40 CFR 1080(b), 264.1080(d), or 264.1082(c)). If any of the exemptions apply, NIEHS must indicate the reasons why Subpart CC is not included in the permit. Otherwise, NIEHS must describe the methods to be used to comply with Subpart CC. The requirements for Subpart CC include the container standards (40 CFR 264.1086), inspection requirements (40 CFR 264.1086 and 264.1088), recordkeeping requirements (40 CFR 264.1089), and reporting requirements (40 CFR 264.1090).  
[40 CFR 264.1080 through 1090]



DEPARTMENT OF HEALTH & HUMAN SERVICES

NC2 750 890 004 (P)

Public Health Service

National Institutes of Health  
National Institute of  
Environmental Health Sciences  
P.O. Box 12233  
Research Triangle Park, N.C. 27709

January 5, 2000

28

Mr. Lebeed Kady  
Hazardous Waste Section  
Division of Solid Waste Management  
North Carolina Department of Environment  
and Natural Resources  
P.O. Box 27687  
Raleigh, North Carolina 27611-7687



Reference: Permit Modification Request - Closure Plan  
NIEHS - NC2750890004

Dear Mr. Kady:

In accordance with 40 CFR 264.112(c) the National Institute of Environmental Health Sciences (NIEHS) is requesting a modification to our Closure Plan under permit number NC2750890004-M2. The modification request pertains to closure procedures for the hazardous waste incinerator. As stated in the original closure plan, the NIEHS planned to perform a decontamination and RCRA closure on the incinerator followed by dismantling and disposal of the unit. Under the enclosed modified closure plan, the NIEHS proposes to perform the decontamination and RCRA closure of the incinerator, with the option to retain the unit for service as a pathological incinerator upon certification of RCRA closure and acceptance by the North Carolina Hazardous Waste Section.

I have enclosed two(2) copies of the modified Part I - Closure Plan. One of the copies has the additions to the plan highlighted.

Please contact me at (919) 541-7713 if you have any questions.

Sincerely,  
  
Kent Stone  
Hazardous Waste Specialist

Enclosure

cc: Scott Merkle, HSB  
Phillip Orozco, NC Haz. Waste Mgmt.



### Meeting Attendance Record

Facility NIEHS & EPA Waste Handling Facility ?  
EPA ID NC2 750 890 004  
Date 7/19/99

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Please complete the information requested below. Copies will be made available after the meeting.

Attending:	Representing:	Phone Number:
1. <u>Lebeed Kady</u>	<u>NC Hazardous Waste</u>	<u>919-733-2178 X224</u>
2. <u>Scott Merkle</u>	<u>NIEHS</u>	<u>919-541-7933</u>
3. <u>Cara B. Lucas</u>	<u>EPA</u>	<u>919-541-1086</u>
4. <u>Kent Stone</u>	<u>NIEHS</u>	<u>919-541-7713</u>
5. <u>Kathy Lawson</u>	<u>NC HWS</u>	<u>919-733-2178 x.229</u>
6. _____	_____	_____
7. _____	_____	_____
8. _____	_____	_____
9. _____	_____	_____
10. _____	_____	_____
11. _____	_____	_____
12. _____	_____	_____
13. _____	_____	_____
14. _____	_____	_____