



Department of Environmental Protection

FILE COPY

Lawton Chiles
Governor

Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Virginia B. Wetherell
Secretary

AIRS I.D. Number: 0330127
Air Permit Number: 0330127-001-AF
Emission Units: 001,006,007,008,009
Date of Issue: December 13, 1996
Amended: November 21, 1997
Expiration Date: December 13, 2001
County: Escambia

Steven F. Sharp
Environmental/Safety Officer
Gelman Sciences, Inc.
8780 Ely Road, Ellyson Industrial Park
Pensacola, Florida 32514

Dear Mr. Sharp:

This is in response to your November 17, 1997 request to modify the language of specific condition 3 of the above referenced permit. The correction has no impact on emissions. By this letter Specific Condition No. 3 of Permit Number 0330127-001-AF is amended as follows:

From:

3. The maximum allowable operating rates are:

- EMU 001 (Fabric coater and membrane post treater): 2905 sf/hr fabric product
- EMU 006 (Mixing room: volatiles): 80 lbs VOLs per hour
- EMU 007 (Membrane finishing systems): 5412 sq ft/hr membrane treated with methanol or acetone
- EMU 008 (Membrane casting): 1700 sq ft/hr membrane product for both belts
- EMU 009 (Mixing room: solids): 228 pounds solids per hour

These are the operating rates at which compliance with standards shall be demonstrated.
[FAC Rule 62-4.070]

To:

3. The maximum allowable operating rates are:

- EMU 001 (Fabric coater and membrane post treater): 2905 sf/hr fabric product
- EMU 006 (Mixing room: volatiles): 80 lbs VOLs per hour
- EMU 007 (Membrane finishing systems): 5412 sq ft/hr membrane treated with methanol/UV treatment
- EMU 008 (Membrane casting): 1700 sq ft/hr membrane product for both belts
- EMU 009 (Mixing room: solids): 228 pounds solids per hour

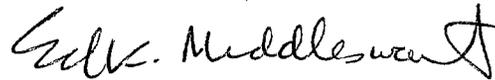
These are the operating rates at which compliance with standards shall be demonstrated.
[FAC Rule 62-4.070]

Page Two
Amendment to 0330127-001-AF
Gelman Sciences, Inc.

All **other** specific conditions of this permit remain in effect.

This letter shall be attached to and made part of Permit Number 0330127-001-AF.

Sincerely,

A handwritten signature in black ink, appearing to read "Ed K. Middleswart". The signature is written in a cursive style with a large, stylized initial "E".

Ed K. Middleswart, P.E.
Air Program Administrator

EKM:rb

cc: DEP Division of Air Resources Management, Tallahassee



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AIRS I.D. Number: 0330127
Air Permit Number: 0330127-001-AF
Emission Units: 001,006,007,008,009
Date of Issue: December 13, 1996
Expiration Date: December 13, 2001
Amended: January 21, 1997
County: Escambia
Project: Fabric coating; and, membrane casting and finishing operations

Steven F. Sharp
Environmental/Safety Specialist
Gelman Sciences, Inc.
8780 Ely Road, Ellyson Industrial Park
Pensacola, Florida 32514

Dear Mr. Sharp:

This is in response to January 14, 1997 letter requesting an amendment to the above referenced permit.

By this letter Specific Condition No. 5 of Permit Number 0330127-001-AF is amended as follows:

From:

5. The Permittee shall maintain the following operations performance parameters:

<u>Emission unit</u>	<u>Treatment device</u>	<u>Performance parameter</u>
EMU 001	scrubber	30 to 70 gpm make up water
EMU 006	scrubber	0.3 to 1 gpm make up water
EMU 007	scrubber	1-3 gpm make up water air flow velocity of 1,500 to 2,500 linear feet per minute
EMU 008	scrubber	40 to 80 gpm make up water
EMU 009	baghouses; DC-1, DC-2	2" to 7" WG for DC-1 1" to 3" WG for DC-2

These shall be surrogate compliance parameters for particulate matter.
(FAC Rule 62-4.070)

To:

5. The Permittee shall maintain the following operations performance parameters:

<u>Emission unit</u>	<u>Treatment device</u>	<u>Performance parameter</u>
EMU 001	scrubber	30 to 70 gpm make up water
EMU 006	scrubber	0.3 to 1 gpm make up water
EMU 007	scrubber	1-3 gpm make up water air flow velocity of 1,500 to 2,500 linear feet per minute
EMU 008	scrubber	40 to 80 gpm make up water
EMU 009	baghouses; DC-1, DC-2	2" to 9" WG for DC-1 1" to 5" WG for DC-2

These shall be surrogate compliance parameters for particulate matter.
(FAC Rule 62-4.070)

All **other** specific conditions of this permit remain in effect.

This letter shall be attached to and made part of Permit Number 0330127-001-AF.

Sincerely,



Ed K. Middleswart, P.E.
Air Program Administrator

EKM:rbc

cc: DEP Division of Air Resources Management, Tallahassee



Department of Environmental Protection

FILE COPY

Lawton Chiles
Governor

Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Virginia B. Wetherell
Secretary

PERMITTEE:

Gelman Sciences, Inc.

AIRS I.D. Number: 0330127
Air Permit Number: 0330127-001-AF
Emission Units: 001,006,007,008,009
Date of Issue: December 13, 1996
Expiration Date: December 13, 2001
County: Escambia
Project: Fabric coating; and, membrane casting
and finishing operations.

This permit is issued under the provisions of Section 403.087, Florida Statutes, and Florida Administrative Code Rules 62-296, 62-297 and 62-4. The above named applicant, hereinafter called Permittee, is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Operation of a manufacturing facility producing various filtration devices for pharmaceutical and industrial uses. The manufacturing processes include fabric coating; and, mixing, membrane casting, and membrane finishing operations. Emission units are assigned to fabric coating (EMU 001), membrane mixing (EMU 006, VOLs; and EMU 009, solids), membrane finishing (007), and membrane casting (EMU 008).

Volatile organic compound (VOCs) emissions associated with fabric coating, membrane casting and finishing, and mixing are controlled by scrubbers; and, particulate emissions from mixing are controlled by baghouses. Total facility emissions are limited to 94 TPY VOCs by limiting process rates and hours of operation.

During the fabric coating process (EMU 001) a fabric substrate is coated with a gelatinous mixture containing volatile solvents. The volatile solvents are evaporated; and VOC emissions are controlled by limiting hours of operation and by a Duall wet scrubber (Model F103-32"). The coated fabrics are washed in a series of quench and rinse tanks, and dried in an electric and/or steam oven. Additional post treatment drying may be provided in a steam heated Astec oven with emissions controlled by the wet scrubber.

During the mixing process, raw materials are combined in mixing tanks and reactors.

0330127-001-AF

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"Protect, Conserve and Manage Florida's Environment and Natural Resources"

PERMITTEE:

Gelman Sciences, Inc.

AIRS I.D. Number: 0330127

Air Permit Number: 0330127-001-AF

Emission Units: 001,006,007,008,009

Date of Issue: December 13, 1996

Expiration Date: December 13, 2001

Vapors from the mixing process are collected through five pick-up points with 2000 CFM air flow and treated with a Duall wet scrubber (Model F108-36) (EMU 006).

Two dust collectors and duct systems (EMU 009) collect and control particulate emissions resulting from the mixing process. The first system (DC-1) consists of six pick-up points and a thirty bag collector (Dustex CJU 400) with 440 square feet of surface area designed for 2,800 CFM. The second system (DC-2) consists of four pick-up points and a twenty bag collector (Dustec CJU 200) with 220 square feet of surface area designed for 1,400 CFM.

During the membrane casting process (EMU 008), various microporous membrane products are made by casting a solution made from plastic resins, solvents, and non-solvents on a slow moving stainless steel belt. The gel is set up by multistage humid drying. There are two identical membrane casting lines (2 and 3) which may operate up to a maximum combined total of 17,520 hours per year, but may only operate up to 6000 hours per year with products with VOC emissions between 6.7 and 15.3 pounds/hour. VOC emissions are controlled by limiting combined hours of membrane casting of specified products and with Duall wet scrubbers (Model F103-32”).

The membrane finishing systems (EMU 007) include HCFC 141B treatment and recovery units (Antarco), UV lamp drying, and a double bath wash. VOC emissions are controlled limiting hours of operation and with a Duall wet scrubber (Model PT500).

Operation shall be consistent with the construction permits AC17-192809 issued February 21, 1991 for the Fabric Coater; AC17-236511 issued January 3, 1994 for the mixing processes solids and vapor collection systems; AC17-173051 issued April 26, 1990 for the membrane casting belts; AC17-239150 for the membrane finishing systems, and the operation permit application signed October 9, 1996.

Emissions from this facility are limited to less than 100 TPY of any single criteria pollutant, and less than 10 TPY of any individual HAP or 25 TPY of combined HAPs by limiting hours of operation and pollution controls. As a result, this facility is a “synthetic minor” facility not required to obtain a Title V permit under the provisions of Chapter 213, FAC. Maximum potential emissions include 94 TPY VOCs; or, 5.6 TPY VOC, fabric-coater; 84.7 TPY VOC, membrane casting lines; 1.5 TPY VOC, mixing room; and 2.0 TPY VOC and methanol (H115), membrane finishing.

Located: 8780 Ely Road, Elyson Industrial Park, Pensacola, Escambia County

PERMITTEE:

Gelman Sciences, Inc.

AIRS I.D. Number: 0330127

Air Permit Number: 0330127-001-AF

Emission Units: 001,006,007,008,009

Date of Issue: December 13, 1996

Expiration Date: December 13, 2001

SPECIFIC CONDITIONS:

General

1. The attached General Conditions are part of this permit. [FAC Rule 62-4.160]
2. Satisfactory ladders, platforms and other safety devices as well as necessary parts shall be provided/made available to facilitate an adequate inspection program.
[FAC Rule 62-297.310(6)]

Operation

3. The maximum allowable operating rates are:

EMU 001 (Fabric coater and membrane post treater):	2905 sf/hr fabric product
EMU 006 (Mixing room: volatiles):	80 lbs VOLs per hour
EMU 007 (Membrane finishing systems):	5412 sq ft/hr membrane treated with methanol or acetone.
EMU 008 (Membrane casting):	1700 sq ft/hr membrane product for both belts
EMU 009 (Mixing room: solids):	228 pounds solids per hour

These are the operating rates at which compliance with standards shall be demonstrated.
[FAC Rule 62-4.070]

4. The maximum hours of operation are as follows:

EMU 001 (Fabric coater and membrane post treater):	4160 hours/year
EMU 006 (Mixing room: volatiles):	unlimited

PERMITTEE:

Gelman Sciences, Inc.

AIRS I.D. Number: 0330127

Air Permit Number: 0330127-001-AF

Emission Units: 001,006,007,008,009

Date of Issue: December 13, 1996

Expiration Date: December 13, 2001

SPECIFIC CONDITIONS:

- EMU 007 (Membrane finishing systems): unlimited for Hydrophobic and Repel Treatment; 621 hours/year methanol/UV Treatment
- EMU 008 (Membrane casting): 6,000 hours of total production of Type I products (6.7 lbs/hr \geq VOC \geq 15.3 lbs/hr) unlimited for other products
- EMU 009 (Mixing room: solids): unlimited

The Permittee shall maintain operation logs available for Department inspection certifying the total hours of operation and type products or treatment annually of emission units 001, 007, and 008. [FAC Rule 62-4.070 and construction permit application]

5. The Permittee shall maintain the following operations performance parameters:

Emission unit	Treatment device	Performance parameter
EMU 001	scrubber	30 to 70 gpm make up water
EMU 006	scrubber	0.3 to 1 gpm make up water
EMU 007	scrubber	1-3 gpm make up water air flow velocity of 1,500 to 2,500 linear feet/minute
EMU 008	scrubber	40 to 80 gpm make up water
EMU 009	baghouses; DC-1, DC-2	2" to 7" WG, DC-1 1" to 3" WG, DC-2

These shall be surrogate compliance parameters for particulate matter. (FAC Rule 62-4.070)

PERMITTEE:

Gelman Sciences, Inc.

AIRS I.D. Number: 0330127

Air Permit Number: 0330127-001-AF

Emission Units: 001,006,007,008,009

Date of Issue: December 13, 1996

Expiration Date: December 13, 2001

SPECIFIC CONDITIONS:

6. All vats, containers, etc., that are used for temporary and permanent storage of VOC/organic solvents shall be covered to prevent vaporization of VOC when not in use. All equipment, pipes, hoses, lids, fittings, etc., shall be operated/maintained in such a manner as to minimize leaks, fugitive emissions and spills of VOC materials. [FAC Rule 62-296.320(1)(a)]

Emissions

7. The maximum allowable emission limit for each pollutant is as follows:

Pollutant	FAC Rule	Allowable Emissions
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EMU 001 (Fabric coater and membrane post treater):

VOC	62-4.070	5.6 TPY
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EMU 006 (Mixing room: volatiles):

VOC	62-4.070	1.5 TPY
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EMU 007 (Membrane finishing systems):

VOC	62-4.070	2.0 TPY
Methanol (H115)		2.0 TPY

EMU 008 (Membrane casting):

VOC	62-4.070	85 TPY
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EMU 009 (Mixing room: solids):

VE	62-297.620(4)	5% opacity
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8. This source shall be operated in such a fashion so as to preclude objectionable odors. Objectionable odor is any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance pursuant to FAC Rule 62-210.200(198)

PERMITTEE:

Gelman Sciences, Inc.

AIRS I.D. Number: 0330127

Air Permit Number: 0330127-001-AF

Emission Units: 001,006,007,008,009

Date of Issue: December 13, 1996

Expiration Date: December 13, 2001

SPECIFIC CONDITIONS:

If the Department determines objectionable odors are being emitted from this facility, the Permittee shall submit within 45 days of receipt of written notification from the Department an odor remediation plan. The plan shall include, but is not limited to, the following:

1. Dispersion modeling analysis to show compliance with ambient acceptable odor threshold value(s).
2. Strategies to reduce odorous chemical utilization or emissions.
3. Modification of manufacturing production cycles.
4. Modification of manufacturing methods.
5. Modification of plant exhaust systems.

(FAC Rule 62-296.320(2))

Testing

9. A visible emissions test of emission unit EMU 009 (Mixing room: solids) is required to show compliance with the standards of the Department. The test results must provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate. [FAC Rule 62-297.310(2)] Tests shall be conducted in accordance with DEP method 9, and shall be scheduled between April 1 and May 31, 2001. The Department shall be notified at least 15 days prior to testing to allow witnessing. Results shall be submitted to the Department within 45 days after testing.

Test reports shall comply with F.A.C. Rule 62-297.310(8), Test Reports. Additionally, the compliance test report shall provide the general condition and operating parameters of the equipment.

The Department can require special compliance tests in accordance with F.A.C. Rule 62-297.310(7)(b).

Other test methods and alternate compliance procedures may be used only after prior Departmental approval has been obtained in writing.

PERMITTEE:

Gelman Sciences, Inc.

AIRS I.D. Number: 0330127

Air Permit Number: 0330127-001-AF

Emission Units: 001,006,007,008,009

Date of Issue: December 13, 1996

Expiration Date: December 13, 2001

SPECIFIC CONDITIONS:

Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 90-100% of rated capacity. If it is impractical to test at capacity, then sources may be tested at less than capacity; in this case subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the Department. [FAC Rule 62-297.310(2)]

10. The Permittee shall maintain records for each emission unit and product line showing hours of operation, production, and calculated VOC and HAP emissions. The records shall be summarized by month and calendar year; and, shall be maintained and made available for Department inspection. (FAC Rule 62-4.070)

11. The Permittee shall develop a protocol to verify emission factors and treatment efficiencies associated with individual HAP emissions in excess of 1000 lbs/year and individual VOC emissions in excess of 5 TPY. The protocol shall include appropriate testing which shall be completed prior to December 31, 2000; and shall be submitted to the Department for review and approval prior to December 31, 1999. (FAC Rule 62-4.070)

Administrative

12. An annual operating report for air pollutant emitting facility, DEP Form 62-210.990(5), shall be submitted by March 1 of each year. A copy of the form and instructions may be obtained from the Department of Environmental Protection, Northwest District Air Resources Management Program, (904) 444-8364. [FAC Rule 62-210.370(3)]

13. Sixty days prior to the expiration date of this operation permit, the Permittee shall submit four permit renewal applications using the current version of the renewal form along with the processing fee established in FAC Rule 62-4.050(4) to the Northwest District Office of the Department. (FAC Rule 62-4.090)

14. The emission units covered by this permit are:

- 0330127 001: Fabric coater and membrane post treater
- 006: Mixing room (volatile organic liquids)
- 007: Membrane finishing systems
- 008: Membrane casting
- 009: Mixing room (solids)

PERMITTEE:

Gelman Sciences, Inc.

AIRS I.D. Number: 033012 /

Air Permit Number: 0330127-001-AF

Emission Units: 001,006,007,008,009

Date of Issue: December 13, 1996

Expiration Date: December 13, 2001

SPECIFIC CONDITIONS:

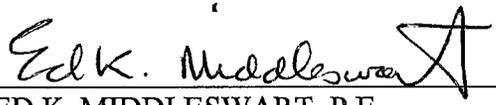
Please cite the appropriate number on all test reports and other correspondence specific to a permitted emission unit. [FAC Rule 62-297.310(8)]

15. The Department telephone number for reporting problems, malfunctions or exceedances under this permit is (904) 444-8364, day or night, and for emergencies involving a significant threat to human health or the environment is (904) 488-1320. For routine business, telephone (904) 444-8364 during normal working hours. [FAC Rule 62-4.130]

Expiration Date:

Issued this 13th day of DEC.,
1996.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


ED K. MIDDLESWART, P.E.
Air Program Administrator

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "permit conditions", and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:
 - a. Having access to and copying any records that must be kept under the conditions of this permit;
 - b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and,

GENERAL CONDITIONS:

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. A description of and cause of noncompliance; and
- b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

GENERAL CONDITIONS:

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurement;
- the person responsible for performing the sampling or measurement;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

14. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.