

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
BEFORE THE ADMINISTRATOR**

IN THE MATTER OF	*	PETITION FOR OBJECTION
	*	
Clean Air Act Synthetic Minor Operating	*	
Permit Nos. 503-5007-X001 and	*	
503-5007-X022	*	
	*	
Issued to Kemira Chemicals, Incorporated	*	
	*	
Issued by the Alabama Department of	*	
Environmental Management	*	

**PETITION REQUESTING THAT THE ADMINISTRATOR OBJECT TO ISSUANCE  
OF THE CLEAN AIR ACT SYNTHETIC MINOR OPERATING PERMIT FOR THE  
KEMIRA CHEMICALS FACILITY, PERMIT NO. 503-5007-X001 and 503-5007-X022**

Pursuant to Clean Air Act § 505(b)(2), 42 U. S. C. § 7661d(b)(2), and 40 C.F.R. § 70.8(d), the Clean, Healthy, Educated, Safe and Sustainable Community, Inc., (CHESS Community), a community-based organization in Mobile, Alabama, petitions the Administrator of the U.S. Environmental Protection Agency (EPA) to object to the Title V synthetic minor operating permit no. 503-5007-X001 and 503-5007-X022 issued to Kemira Chemicals, Inc. for the construction and operation of a bio-acrylamide production unit, two generators, and a fire pump that would expand its existing chemical manufacturing facility located in Mobile, Alabama. The Alabama Department of Environmental Management (ADEM) issued the two Title V synthetic minor operating permits to Kemira Chemicals, Inc.

CHESS Community respectfully requests that EPA object to the Title V synthetic minor operating permits for Kemira’s bio-acrylamide production unit, generators and fire pump because they do not comply with the Clean Air Act and are not enforceable as a practical matter to restrict the facility-wide potential to emit as a synthetic minor source.

## I. BACKGROUND

Kemira currently operates a facility that contains several units currently operating under different Title V synthetic minor operating permits.<sup>1</sup> On or about May 30, 2018, a shipment of overheated bio-acrylamide arrived by train at the Kemira facility, which caused an emergency that the local fire department responded to in an effort to prevent the release of the bio-acrylamide into the air.<sup>2</sup> According to the news report, emergency responders initiated an evacuation of residents in the community of Chickasaw as a precaution during the facility incident.<sup>3</sup> However, during the public hearing on the draft permits for the proposed Kemira facility expansion, residents of Africatown who live across a roadway from the Kemira facility, complained that they were not evacuated or even notified of the emergency. The incident lasted for approximately five hours as the fire department and Kemira employees worked to stabilize the shipment of bio-acrylamide.<sup>4</sup>

Approximately two weeks prior to the bio-acrylamide incident, Kemira submitted an application for Title V synthetic minor operating permits that would allow the construction and operation of a bio-acrylamide production unit as well as two emergency generators and a fire

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<sup>1</sup> The ADEM online permit file shows that the Kemira Chemicals facility, formerly owned by Cytec Industries, Inc., is considered a synthetic minor source.

<sup>2</sup> Attachment 1: News 5 WKRG, *Mobile Fire Working Hazmat at Kemira Water Solutions*, May 30, 2018 (see also <https://www.wkrg.com/news/mobile-county/mobile-fire-working-hazmat-situation-at-kemira-water-solutions/1208444142>).

<sup>3</sup> *Id.*

<sup>4</sup> *Id.*

pump at the existing facility.<sup>5</sup> As shown below in the excerpts from the application submitted by Kemira,<sup>6</sup> there are several omissions of required information regarding emission limitations:

- a. Kemira did not provide, as required by the Clean Air Act and regulations, the emission rate for each regulated air pollutant from the specific units. Instead, Kemira provides the facility-wide emission limits for these pollutants.<sup>7</sup>

**10. For those making application for a synthetic minor or major source operating permit, please summarize each pollutant emitted and the emission rate for the pollutant. Indicate those pollutants for which the facility is major.**

Regulated pollutant	Potential Emissions* (tons/year)	Major source? yes/no
Volatile Organic Compounds	<96	No
Total HAP's (Combined)	<18	No
Individual HAPs (See Attachment 103#10)	<9	No
Carbon Monoxide	<90	No
Nitrogen Oxide	<90	No
Particulate	<90	No
Sulfur Dioxide	<90	No

<sup>5</sup> Attachment 2: ADEM Engineering Analysis, August 20, 2018.

<sup>6</sup> Attachment 3: Construction Air Permit Application and Revised Synthetic Minor Operating Permit Application for Kemira Chemicals, Inc., May 2018.

<sup>7</sup> Id. at Section 2.0, ADEM Form 103.

- b. Kemira did not provide, as required by the Clean Air Act and regulations, the basis of estimate for air pollutants that would be emitted from the proposed bio-acrylamide unit, but only the facility-wide emission limits which are not actual emission levels.<sup>8</sup>

11. Air contaminants emitted: Basis of estimate (material balance, stack test, emission factor, etc.) must be clearly indicated on calculations appended to this form. Fugitive emissions must be included and calculations must be appended.

Emission Point	Pollutants	Potential Emissions			Regulatory Emission Limit	
		(lb/hr)	(Tons/yr)	Basis of Calculation	(lb/hr)	(units of standard)
PLANT WIDE	VOLATILE ORGANIC COMPOUNDS (VOC)	Batch	96	ENGINEERING CALCULATIONS		
PLANT WIDE	HAZARDOUS AIR POLLUTANTS (HAPs)	Batch	<18	ENGINEERING CALCULATIONS		
PLANT WIDE	INDIVIDUAL HAPs See Attachment 1 - (103#10)	Batch	<9	ENGINEERING CALCULATIONS		
PLANT WIDE	OXIDES OF NITROGEN (NOx)	Batch	<90	ENGINEERING CALCULATIONS		
PLANT WIDE	CARBON MONOXIDE	Batch	<90	ENGINEERING CALCULATIONS		
PLANT WIDE	PARTICULATE MATTER (PM)	Batch	<90	ENGINEERING CALCULATIONS		
PLANT WIDE	OXIDES OF SULFUR (SOx)	Batch	<90	ENGINEERING CALCULATIONS		

- c. Kemira did not provide, as required by the Clean Air Act and regulations, information regarding pollution control devices.

<sup>8</sup> *Id.* at Section 2.0, ADEM Form 105.

# **ATTACHMENT 7**

## **SCRUBBER SPECIFICATIONS**

### **TO BE PROVIDED UPON** **COMPLETION OF FINAL DESIGN**

ADEM did not require Kemira to provide additional information to address these and other omissions. Instead, ADEM accepted these omissions and issued two Title V synthetic minor operating permits to Kemira Chemical (permit nos. 503-5007-X001 and 503-5007-X022).<sup>9</sup> In its response to public comments and final decision, ADEM provides the following statement:

The Department finds that the emission limitations on VOCs and HAPs as well as the recordkeeping and reporting requirements listed in the permit are sufficient to restrict Kemira Chemicals, Inc. to minor source status in accordance with rules in Alabama Administrative Code, 335-3-15.

## **II. The Legal Framework**

Section 502(d)(1) of the Clean Air Act, 42 U.S.C. § 7661a(d)(1), requires each state to develop and submit to EPA an operating permit program intended to meet the requirements of

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<sup>9</sup> Attachment 4: *ADEM Permit Issued to Kemira Chemicals, Inc.*, December 14, 2018.

Title V of the Act. Alabama’s approved Title V program is incorporated into the Alabama Administrative Code, 335-3-15 and 335-3-16.

Any person wishing to construct a new major stationary source of air pollutants must apply for and obtain a Title V permit before commencing construction. 42 U.S.C. § 7661b(c). The Title V permit must “include enforceable emission limitations and standards . . . and such other conditions as are necessary to assure compliance with applicable requirements of [the Clean Air Act and applicable State Implementation Plan (“SIP”)].” 42 U.S.C. 7661c(a).

The Clean Air Act mandates that EPA “shall issue an objection . . . if the petitioner demonstrates to the Administrator that the permit is not in compliance with the requirements of the . . . [Clean Air Act].” 42 U.S.C. § 7661d(b)(2). *See also* 40 C.F.R. §70.8(c)(1); *New York Public Interest Group v. Whitman*, 321 F.3d 316, 332-34 (2nd Cir. 2003).

The EPA has objected under Title V to synthetic minor operating permits that provide insufficient monitoring to ensure restrictions on emission limits that are enforceable as a practical matter. *See, e.g., Yuhuang Chemical, Inc. Methanol Plant*, No. VI-2015-03, 2014 WL 4292232, at 16 (Aug. 31, 2016) (EPA Order).

### **III. CHESS Community, Inc. Meets the Procedural Requirements for the Title V Petition.**

On May 14, 2018, Kemira Chemicals, Inc. submitted an application to ADEM for a Title V synthetic minor operating permit for the construction and operation of a bio-acrylamide production unit, two generators and a fire pump at its existing facility, which operated pursuant to a number of Title V synthetic minor operating permits.<sup>10</sup> ADEM opened a 15-day period for

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<sup>10</sup> Attachment 3: *Construction Air Permit Application and Revised Synthetic Minor Operating Permit Application for Kemira Chemicals, Inc.*, May 2018.

public comment on the draft permits for Kemira’s planned facility expansion.<sup>11</sup> The CHESS Community organization requested additional time for public comments and a public hearing on the draft permits in Africatown’s community center.<sup>12</sup> ADEM partially complied with this request by extending the period for public comments and holding a public hearing, not in Africatown, but at a high school gym located in the town of Chickasaw, which is located several miles away from the Kemira Chemical facility and Africatown. CHESS Community timely filed comments on November 30, 2018. On December 14, 2018, ADEM issued two Title V synthetic minor operating permits to Kemira (permit nos. 503-5007-X001 and 503-5007-X022). On December 22, 2018, a federal government shutdown took place that suspended the 45-day time period for EPA’s review of the permits. In response to inquiries by and on behalf of the Chess Community, the EPA emailed notice on February 14, 2019 of its decision to resume the review of the permits following the interruption of the government shut-down.<sup>13</sup>

Section 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), provides that, if EPA does not object to a permit, any person may petition the Administrator, within 60 days of the expiration of EPA’s 45-day review period, to object to the permit. *See also* 40 C.F.R. § 70.8(d). CHESS Community timely files the Petition to Object within the 60 days of the EPA review period interrupted by the government shut-down.

The petition must “be based only on the objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting agency. . . .”

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<sup>11</sup> Attachment 5: *ADEM Public Notice*, September 24, 2018.

<sup>12</sup> Attachment 6: *CHESS letters to ADEM*, October 9, 2018 and October 19, 2018.

<sup>13</sup> Attachment 7: EPA email notifying CHESS Community that review of the permits issued by ADEM to Kemira Chemicals resumed on February 14, 2019 following the interruption of the government shut-down.

42 U.S.C. § 7661d. CHESS Community bases this Petition on the comments prepared jointly by it and the Deep South Center for Environmental Justice<sup>14</sup> as well as public comments numbered 11, 13 - 14 in the ADEM Response to Public Comments.<sup>15</sup>

**IV. EPA Must Object Because the Permits Do Not Include Any Emission Limits and Information about Pollution Control Devices, and, Therefore, Fail to Assure Compliance with PSD Requirements.**

Kemira's proposed bio-acrylamide production unit has the potential to emit VOCs and HAPs in excess of the applicable 100 tons per year (TPY) threshold for major stationary sources.<sup>16</sup> Such sources must comply with the Clean Air Act's Prevention of Significant Deterioration (PSD). However, ADEM approved permits for Kemira without setting restrictions on the potential to emit VOCs and HAPs that are enforceable as practical matter. The permit issued by ADEM makes a vague reference to monitoring and recordkeeping, but these enforcement mechanisms are meaningless without unit-specific emission limits on VOCs and HAPs. In fact, ADEM issued the permit without Kemira identifying individual HAPs that would be emitted from the bio-acrylamide unit, which does not comply with the Clean Air Act and regulations.<sup>17</sup> Moreover, Kemira never identified any of the individual HAPs. Instead, Kemira inserted in its application a copy of the entire 189 or so HAPs listed in the Clean Air Act.<sup>18</sup>

Additionally, the approved SIP for Alabama requires ADEM to specify the pollution controls to ensure restrictions on the potential to emit by synthetic minor sources. The SIP

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<sup>14</sup> Attachment 8: *CHESS and DSCEJ Comment Letter*, November 30, 2018.

<sup>15</sup> Attachment 9: *ADEM Final Decision and Response to Comments*, December 14 2018.

<sup>16</sup> Attachment 3: *Construction Air Permit Application and Revised Synthetic Minor Operating Permit Application for Kemira Chemicals, Inc.*, May 2018, section 5.0 Emissions, p. 45.

<sup>17</sup> *Id.* at Attachment 1: *List of Individual Haps*.

<sup>18</sup> *Id.*

requires that such a permit “shows every article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants, is so designed, controlled, or equipped with such air pollution control equipment, that it may be expected to operate without emitting or without causing to be emitted air contaminants in violation of [the] Alabama Code.” Ala. Admin. Code, 334-3-15-.02(8)(a). The permits issued by ADEM entirely omit any specific identification or functionality of pollution control equipment. In fact, Kemira repeatedly notes in its application “TBD” -- to be determined -- in lieu of providing the information required for identifying pollution control equipment and documenting the functionality and effectiveness of such equipment.<sup>19</sup>

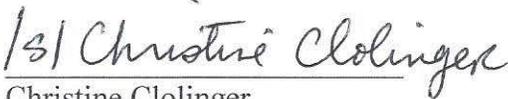
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<sup>19</sup> *Id.* at section 2, *ADEM Form 110: Acrylic Acid Scrubbers* and Attachment 10: *Scrubber Specifications*; see also *herein* “*Background*” (*showing excerpts of application*).

**V. Conclusion**

For the foregoing reasons, EPA should object to the Title V synthetic minor operating permits (permit nos. 503-5007-X001 and 503-5007-X022) issued by ADEM to Kemira for the construction and operation of a new bio-acrylamide production unit, two generators, and a fire pump in Mobile, Alabama.

Sincerely yours,



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