



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

**AUG 13 2015**

REPLY TO THE ATTENTION OF:

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Jim Justice  
Vice President, Corporate Manufacturing  
Kalsec, Inc.  
3713 West Main Street  
Kalamazoo, Michigan 49005

**Re: Finding of Violation**  
Kalsec, Inc.  
Kalamazoo, Michigan

Dear Mr. Justice:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to Kalsec, Inc. (Kalsec or you) under Section 113(a)(3) of the Clean Air Act (CAA), 42 U.S.C. § 7413(a)(3). We find that you have violated or are violating the National Emission Standards for Hazardous Air Pollutants Miscellaneous Organic Chemical Manufacturing at your Kalamazoo, Michigan facility.

Section 113 of the CAA gives EPA several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action.

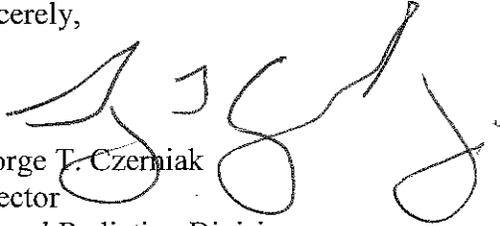
We are offering you an opportunity to confer with us either by telephone or in person about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.



You may contact Alexandra Letuchy at (312) 866-6035 to request a conference. You should make the request for a conference no later than 10 calendar days after receipt of this letter, and we should hold any conference within 30 calendar days after receipt of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. Czerniak', written over the typed name.

George T. Czerniak  
Director  
Air and Radiation Division

Enclosure

cc: Mary Douglas, MDEQ







of these standards is to ensure that all sources achieve the maximum degree of reduction in emissions of HAPs that EPA determines is achievable for each source category.

4. Pursuant to Section 112(b) of the CAA, 42 U.S.C. § 7412(b), EPA designates HAPs, which present or may present a threat of adverse effects to human health or the environment.
5. Section 112(a) of the CAA, 42 U.S.C. § 7412(a), defines “major source” as any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year (TPY) or more of any single HAP or 25 TPY or more of any combination of HAPs.
6. Section 112(i)(3) of CAA, 42 U.S.C. § 7412(i)(3), and 40 C.F.R. § 63.4, prohibit the owner or operator of any source from operating such source in violation of any NESHAP applicable to such source.
7. The NESHAP, at 40 C.F.R. Part 63, Subpart A, contains general provisions applicable to the owner or operator of any stationary source that contains an affected source subject to the NESHAP at Part 63. These general provisions include definitions at 40 C.F.R. § 63.2.
8. The NESHAP, at 40 C.F.R. § 63.2, defines “affected source” as the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a CAA Section 112(c) source category or subcategory for which a Section 112(d) standard or other relevant standard is established pursuant to Section 112 of CAA.
9. The NESHAP, at 40 C.F.R. § 63.2, defines “existing source” as any affected source that is not a new source.
10. The NESHAP, at 40 C.F.R. § 63.2, defines “new source” as any affected source the construction or reconstruction of which is commenced after EPA first proposes a relevant emission standard under 40 C.F.R. Part 63 establishing an emission standard applicable to such source.

**NESHAP for Miscellaneous Organic Chemical Manufacturing at 40 C.F.R. Part 63, Subpart FFFF**

11. On November 10, 2003, EPA promulgated the NESHAP for Miscellaneous Organic Chemical Manufacturing (Miscellaneous Organic NESHAP or MON), codified at 40 C.F.R. Part 63, Subpart FFFF. 68 Fed. Reg. 63888. The MON establishes emission standards, requirements to demonstrate initial and continuous compliance with emission limits, operating limits, work practice standards, and recordkeeping requirements associated with miscellaneous organic chemical manufacturing. *See* 40 C.F.R. § 63.2430.



12. 40 C.F.R. § 63.2445(b) provides that owners and operators of existing sources subject to the MON must comply with the requirements for existing sources no later than May 10, 2008.
13. 40 C.F.R. § 63.2435(a) provides that owners and operators are subject to the MON if they operate miscellaneous organic chemical manufacturing process units (MCPU) that are located at, or are part of, a major source of HAP emissions as defined in Section 112(a) of the CAA.
14. 40 C.F.R. § 63.2550 defines “miscellaneous organic chemical manufacturing process” as all equipment which collectively functions to produce a product or isolated intermediate that is “material” described in 40 C.F.R. § 63.2435(b). Process includes any, all, or a combination of reaction, recovery, separation, purification, or other activity, operation, manufacture, or treatment which is used to produce a product or isolated intermediate.
15. 40 C.F.R. § 63.2435(b) provides that an MCPU includes equipment necessary to operate a miscellaneous organic chemical manufacturing process that, among other things, processes, uses or generates any of the organic HAPs listed in Section 112(b) of the CAA. An MCPU also includes any assigned storage tanks and transfer racks; equipment in open systems that is used to convey or store water having the same concentration and flow characteristics as wastewater; and components such as pumps, compressors, agitators, pressure relief devices, sampling connection systems, open ended valves or lines, valves, connectors, and instrumentation systems that are used to manufacture any material or family of materials, including but not limited to, an organic chemical with an NAICS code listed in 40 C.F.R. § 63.2435(b)(1)(ii).
16. 40 C.F.R. § 63.2435(b)(1)(ii) provides the relevant NAICS code for MON applicability as code 325.

#### **Relevant Factual Background**

17. Kalsec operates a manufacturing facility (facility) at 3713 West Main Street in Kalamazoo, Michigan and has been operating at this location since at least 1967.
18. At the facility, Kalsec processes spices, herbs, and hops to produce essential oil extracts and modified hops for use in the food and beverage industry. Kalsec uses the solvents methanol and hexane, both of which are HAPs, in solvent extraction and distillation processes to separate essential oil from the raw materials.
19. Essential oils are classified under NAICS Code 325 as 325998H103.
20. Michigan Department of Environmental Quality issued a Part 70 operating permit, No. MI-ROP-A1991-2015 to Kalsec on February 23, 2015. Kalsec has the potential to emit 10 TPY or more of a single HAP and 25 TPY or more of combinations of HAPs.



21. From 2008 to the 2013, Kalsec has reported the following actual HAP emissions from the facility:

Year	Methanol (TPY)	n-Hexane (TPY)	Total Reported HAPs (TPY)
2008	3.3	20.8	24.1
2009	2.2	19.2	21.3
2010	2.7	20.4	23.1
2011	6.0	17.8	23.8
2012	3.6	21.7	25.3
2013	6.4	22.2	28.6

22. Kalsec was a major source of HAPs in 2008, 2009, 2010, 2011, 2012, and 2013 because in each of these years it emitted n-hexane in an amount greater than 10 TPY.

23. Kalsec was also a major source of HAPs in 2012 and 2013 because in each of these years it emitted methanol and n-hexane in amounts that when combined exceeded 25 TPY.

#### **Finding of Violation**

24. Kalsec has been and continues to be a major source of HAPs and since at least May 10, 2008, has been required to comply with the requirements of the MON. Kalsec has failed to comply with applicable requirements, which include emission standards, requirements to demonstrate initial and continuous compliance with emission limits, operating limits, work practice standards, and recordkeeping requirements associated with miscellaneous organic chemical manufacturing in violation of the MON.

#### **Environmental Impact of Violation**

25. The violations cited above have resulted in elevated emissions of hexane and methanol.

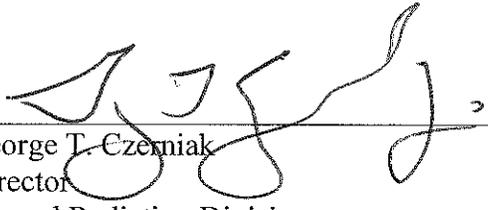
26. Acute exposure to hexane by inhalation causes mild central nervous system depression. Symptoms include dizziness, slight nausea, and headaches. Chronic inhalation exposure is associated with sensorimotor polyneuropathy, such as numbness in the extremities, muscular weakness, blurred vision, headache, and fatigue.



27. Acute exposure to methanol by inhalation may result in visual disturbances, such as blurred or dimness of vision, and neurological damage, specifically permanent motor dysfunction. Chronic inhalation may results in headache, insomnia, conjunctivitis, visual disturbances, and blindness.

Date

8/13/15

  
George T. Czerniak  
Director  
Air and Radiation Division



## CERTIFICATE OF MAILING

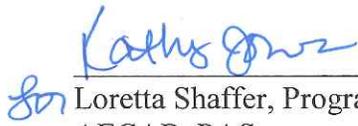
I, Loretta Shaffer, certify that I sent a Finding of Violation, No. EPA-5-15-MI-07, by Certified Mail, Return Receipt Requested, to:

Jim Justice, Vice President, Corporate Manufacturing  
Kalsec Incorporated  
3713 West Main Street  
P.O. Box 50511  
Kalamazoo, Michigan 49005

I also certify that I sent copies of the Finding of Violation by first-class mail to:

Mary Douglas  
Air Quality Division  
Kalamazoo District Office  
7953 Adobe Road  
Kalamazoo, Michigan 49009

On the 17<sup>th</sup> day of August 2015.

  
\_\_\_\_\_  
Loretta Shaffer, Program Technician  
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7644 3579

