

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7
11201 RENNER BOULEVARD
LENEXA, KANSAS 66219**

Received by
EPA Region 7
Hearing Clerk

BEFORE THE ADMINISTRATOR

In the Matter of:)	
)	
Manor Chemical Company, Inc.)	Docket No. CAA-07-2021-0075
)	
Respondent)	
)	

ADMINISTRATIVE ORDER FOR COMPLIANCE

PRELIMINARY STATEMENT

Pursuant to Section 113(a)(3)(B) of the Clean Air Act (“CAA”), 42 U.S.C. § 7413(a)(3)(B), as amended, Manor Chemical Company, Inc. (“Respondent” or “Manor Chemical”), is hereby ordered by the United States Environmental Protection Agency (“EPA”) to comply with the requirements of Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), and to take the specific compliance actions set forth below.

STATUTORY AND REGULATORY BACKGROUND

1. In response to growing public concern and awareness of the threats posed by accidental release of extremely hazardous substances, Congress amended the CAA in 1990 to include the accidental release provisions found in Section 112(r), 42 U.S.C. § 7412(r). The objective of Section 112(r) of the CAA, 42 U.S.C. § 7412(r), is to prevent the accidental release, and to minimize the consequence of any such release, of any substance listed pursuant to Section 112(r)(3) of the CAA, 42 U.S.C. § 7412(r)(3), or any other extremely hazardous substance.

2. Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), commonly referred to as the General Duty Clause, is designed to impose a general duty on owners and operators to operate a safe facility free of accidental releases that threaten life or property by taking all feasible actions that are available to reduce hazards which are known to exist at the facility, or which have been identified for similar facilities in the same industrial group. S. Rep. No. 228, 101st Cong., 1st Sess. 208 (1989).

3. Specifically, Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), sets forth that owners and operators of stationary sources producing, processing, handling or storing substances listed pursuant to Section 112(r)(3), 42 U.S.C. § 7412(r)(3), or any other extremely hazardous substance, have a general duty in the same manner and the same extent as the Occupational Safety and Health Act, 29 U.S.C. § 654 *et. seq.*, to identify hazards which may result from

accidental releases using appropriate hazard assessment techniques, to design and maintain a safe facility, taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases which do occur.

4. Pursuant to Section 112(r)(3), 42 U.S.C. § 7412(r)(3), EPA promulgated a list of substances, which in the case of an accidental release, are known to cause or may reasonably be anticipated to cause death, injury, or serious adverse effects to human health or the environment. This list is codified at 40 C.F.R. § 68.130.

5. Section 302(e) of the CAA, 42 U.S.C. § 7602(e), defines “person” to include any individual, corporation, partnership, association, State, municipality, political subdivision of a State, and any agency department, or instrumentality of the United States and any officer, agent, or employee thereof.

6. Section 112(r)(2)(C) of the CAA, 42 U.S.C. § 7412(r)(2)(C), defines “stationary source” as any buildings, structures, equipment, installations or substance-emitting stationary activities which belong to the same industrial group, which are located on one or more contiguous properties, which are under the control of the same person (or persons under common control), and from which an accidental release may occur.

7. Section 112(r)(2)(B) of the CAA, 42 U.S.C. § 7412(r)(2)(B), defines “regulated substance” as a substance listed pursuant to Section 112(r)(3) of the CAA, 42 U.S.C. § 7412(r)(3).

8. The term “extremely hazardous substance” means an extremely hazardous substance within the meaning of Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1). Such substances include any chemical which may, as a result of short-term exposures associated with releases to the air, cause death, injury, or property damage due to its toxicity, reactivity, flammability or corrosivity.¹ The term includes, but is not limited to, regulated substances listed in Section 112(r)(3), 42 U.S.C. § 7412(r)(3), and 40 C.F.R. 68.130. Also, the release of any substance that causes death or serious injury because of its acute toxic effect or as a result of an explosion or fire or that causes substantial property damage by blast, fire, corrosion, or other reaction would create a presumption that such substance is extremely hazardous.²

9. Section 112(r)(2)(A) of the CAA, 42 U.S.C. § 7412(r)(2)(A) defines “accidental release” as an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.

10. Section 113(a)(3)(B) of the CAA, 42 U.S.C. § 7413(a)(3)(B), grants the Administrator the authority to make a finding of violation of a requirement or prohibition of Title I, which includes Section 112(r), and upon such a finding, to issue an order requiring a

¹ Senate Committee on Environment and Public Works, Clean Air Act Amendments of 1989, Sen. Report No. 228, 101st Congress, 1st Session 211 (1989).

² Id.

person to comply with such requirement or prohibition. By delegation from the Administrator of the EPA and the Regional Administrator of Region 7, the Enforcement and Compliance Assurance Division Director is delegated the authority to issue this Order.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

11. Respondent is Manor Chemical Company, Inc., a corporation doing business in the state of Missouri. Respondent is, and at all times referred to herein was, a “person” as defined by Section 302(e) of the CAA, 42 U.S.C. § 7602(e).

12. Respondent is the owner and operator of the chemical manufacturing facility located at 6901 Heege Road, St. Louis, Missouri 63123 (the “Facility”).

13. The Facility is a “stationary source” as defined by Section 112(r)(2)(C) of the CAA, 42 U.S.C. § 7412(r)(2)(C).

14. Respondent is a chemical wholesale distributor that repackages and custom-blends chemicals. Respondent formulates two mixes, paper adhesives and lacquer thinners, for sale. Respondent currently operates lacquer thinner mixing and flammable liquid storage systems at the Facility. With regard to the lacquer thinner mixing and flammable liquid storage systems, Respondent produces, processes, handles and/or stores bulk quantities of the following extremely hazardous substances: 100 Solvent, 140 Solvent, 150 Solvent, Acetone, Butyl Acetate, Diesel, Ethyl Alcohol (ETOH), Isopropyl Alcohol (IPA), Methyl Ethyl Ketone (MEK), Methanol, Mineral Spirits, Toluol (toluene), Varnish Makers & Painters Petroleum Naphtha (VM&P), and Xylol at the Facility.

15. The substances listed in Paragraph 14, above, have the following characteristics:

- a. 100 Solvent: 100 solvent vapors may cause respiratory irritation and may cause drowsiness or dizziness. Liquid may be fatal if swallowed or enters airways. It is a potential carcinogen. 100 solvent is a class II flammable liquid. Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames. The level that is immediately dangerous to life and health (IDLH) for 100 solvent is 1,000 parts per million (ppm) and is based on that concentration being 10% of the Lower Explosive Limit (LEL).
- b. 140 Solvent: 140 solvent vapors cause mild irritation of respiratory tract. Aspiration causes severe lung irritation and rapidly developing pulmonary edema, as well as central nervous system excitement followed by depression. Ingestion causes irritation of the stomach. It is a potential carcinogen. 140 solvent is a class IIIA flammable liquid. The use of water spray when fighting fire may be inefficient. The IDLH value for 140 solvent is 5,619 ppm.
- c. 150 Solvent: Vapors may cause drowsiness or dizziness and may cause damage to central nervous system. Liquid causes skin irritation and causes serious eye irritation. It may be fatal if swallowed or enters airways. It is a

- potential carcinogen. 150 solvent is a class IIIA flammable liquid. Use of water spray when fighting fire may be inefficient.
- d. Acetone: Inhalation of acetone vapor is irritating to eyes and mucous membranes; acts as an anesthetic in very high concentrations. Ingestion of acetone exhibits a low order of toxicity but very irritating to mucous membranes. Prolonged excessive contact with skin causes defatting of the skin, possibly leading to dermatitis. Acetone is a class IB flammable liquid. Use of water spray when fighting fire may be inefficient; alcohol-resistant foam should be used. The IDLH concentration for acetone is 2,500 ppm.
 - e. Butyl Acetate: Prolonged skin exposure or frequently repeated exposures may lead to drying. Inhalation of butyl acetate causes headaches, dizziness, nausea, irritation of respiratory passages and eyes. Butyl acetate is a class IC flammable liquid. Use of water spray when fighting fire may be inefficient. The IDLH concentration is 1,700 ppm and is based on that concentration being 10% of the LEL.
 - f. Diesel: Liquid is irritating to skin and eyes and is harmful if swallowed. Diesel is a class II flammable liquid. Use of water spray when fighting fire may be inefficient. There is no IDLH value for Diesel.
 - g. Ethyl Alcohol: Vapors are irritating to eyes, nose and throat. Ethyl alcohol is a class IB flammable liquid. Use of water spray when fighting fire may be inefficient. For fire involving ethyl alcohol, alcohol-resistant foam should be used. The IDLH for ethyl alcohol is 3,000 ppm and is based on that concentration being 10% of the LEL.
 - h. Isopropyl Alcohol: Vapors cause mild irritation of eyes and upper respiratory tract; high concentrations may be anesthetic. Liquid irritates eyes and may cause injury; if ingested, causes drunkenness and vomiting. Isopropyl alcohol reacts with air or oxygen to form dangerously unstable peroxides. Isopropyl Alcohol is a class IB flammable liquid. Use of water spray when fighting fire may be inefficient. The IDLH for isopropyl alcohol is 2,000 ppm.
 - i. MEK: MEK liquid causes eye burn. Vapor irritates eyes, nose, and throat; can cause headache, dizziness, nausea, weakness, and loss of consciousness. MEK is a class IB flammable liquid. Use of water spray when fighting fire may be inefficient, alcohol-resistant foam should be used. The IDLH for MEK is 3,000 ppm.
 - j. Methanol: Methanol is a chemical that may, as a result of short-term exposures associated with releases to the air, cause death, injury, or property damage due to its toxicity, flammability, or volatility. Methanol is a class IB flammable liquid that requires specialized fire suppression because it can burn with no visible flame and stays flammable even when mixed with large quantities of water. A 75% water, 25% methanol mixture remains a flammable liquid. Methanol is also toxic. A very small amount of pure methanol can cause severe injury; swallowing less than one fourth of a cup (10-30 ml) can kill an adult. The IDLH concentration for methanol is 6,000 ppm.

- k. Mineral spirits: Vapors cause mild irritation of respiratory tract. Aspiration causes severe lung irritation and rapidly developing pulmonary edema, and central nervous system excitement followed by depression. Ingestion causes irritation of stomach. There is no information regarding the carcinogenicity of mineral spirits but it contains 3-4% benzene which is carcinogenic. Mineral spirits is a class II flammable liquid mineral spirits has a very low flash point: use of water spray when fighting fire may be inefficient.
- l. Toluol or Toluene: Vapors irritate eyes and upper respiratory tract; cause dizziness, headache, anesthesia, respiratory arrest. Liquid irritates eyes and causes drying of skin. If aspirated, causes coughing, gagging, distress, and rapidly developing pulmonary edema. If ingested, causes vomiting, griping, diarrhea, depressed respiration. Toluene is a class 1B flammable liquid and requires specialized firefighting measures as the use of water spray when fighting fire may be inefficient. The IDLH concentration for Toluene is 500 ppm.
- m. Varnish Makers & Painters Naphtha (VM&P): Inhalation of concentrated vapor may cause intoxication. There is no information regarding the carcinogenicity of VM&P naphtha but it contains varying amounts of benzene which is carcinogenic. VM&P naphtha is a class IB flammable liquid and requires specialized firefighting measures as the use of water spray when fighting fire may be inefficient.
- n. Xylol or Xylene: May cause toxic effects if inhaled or absorbed through skin. Inhalation or contact with material may irritate or burn skin and eyes. Fire will produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Runoff from fire control or dilution water may cause pollution. Xylene is a class IB flammable liquid. The IDLH concentration for xylene is 900 ppm.

Accordingly, each of these substances is an “extremely hazardous substance” within the meaning of the General Duty Clause of Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1).

16. Respondent is subject to the requirements of Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), because it is the owner and operator of a stationary source that is producing, processing, handling or storing substances listed pursuant to Section 112(r)(3), 42 U.S.C. § 7412(r)(3) and/or extremely hazardous substances pursuant to Section 112(r)(2)(B) of the CAA, 42 U.S.C. § 7412(r)(2)(B).

17. On April 29, 2021, a fire occurred in the Facility’s “Mixing Building,” where one of Respondent’s employees was working to produce an adhesive product in a large mixer. According to reports to the St. Louis County Hazardous Materials Team and statements to EPA, the product at that stage is extremely flammable and the employee reported that static electricity ignited the substance and the fire spread quickly, engulfing the entire building. Three full 55-gallon drums of ignitable hazardous waste adhesive were located in the same room, caught fire, and likely contributed to the size of the overall fire. A large chemical tank containing 100 Solvent also caught fire and was destroyed. The St. Louis County Hazardous Materials Response

Team responded to the fire. The intensity of the flames and large amount of smoke and residue caused the local fire department to order road closures and evacuation of residences in this highly populated area. The evacuation applied to residences which were located within 0.5 miles of the Facility. The fire destroyed the facility's mixing building and associated equipment.

18. The unanticipated emission from extremely hazardous substances into the air as a result of the fire at the Facility constitutes an accidental release as defined by Section 112(r)(2)(a) of the CAA, 42 U.S.C. § 7412(r)(2)(A).

19. On June 8-9, 2021, EPA inspectors conducted an inspection at the Facility. The EPA inspectors found that, among other things, the equipment in the facility was not operated to prevent electrostatic ignitions or to properly control ignition sources in the presence of flammable substances in several parts of the Facility. Examples of the lack of proper control of ignition sources included the mixer being wired into a non-explosion proof/non-intrinsically safe wiring system that was open with exposed wiring at the time of the inspection. The EPA inspectors also observed that arc welding and cutting with oxy-acetylene torches were activities conducted in an area containing highly flammable substances.

20. Additionally, the EPA inspectors found that Respondent stored incompatible substances in close proximity to one another in the Facility's garage. The incompatible materials included sulfuric acid 66, phosphoric acid 85, muriatic acid 20, borax decahydrate, and synthetic camphor powder, which, when mixed together, accidentally, or otherwise, may cause violent reactions, including heat generation, source of ignition, and toxic gas generation.

21. Respondent told the EPA inspectors it had not conducted a review of the hazards at the Facility. Specifically, Respondent had not evaluated or prepared fire prevention, fire control and emergency action plans.

22. The EPA inspection also revealed that Respondent had not conducted tank integrity inspections of its steel bulk storage tanks at the Facility. Some tanks had been observed as leaking and removed from service. Vegetation and flammable material had been allowed to collect near the tanks. The paint on the exterior of many of the tanks had deteriorated sufficiently to allow corrosion, which reduces tank wall thickness.

23. Generally accepted engineering practices that apply to Respondent's Facility include, but are not limited to, the following:

- a. National Fire Protection Association (NFPA) Code 30, Flammable and Combustible Liquids Code, section 6.4.1 states, "operations involving ignitable (flammable or combustible) liquids shall be reviewed to ensure that fire and explosion hazards are addressed by fire prevention, fire control, and emergency action plans, except as provided in 6.4.1.1."
- b. NFPA Code 30, section 4.5.3.4 states, "All equipment such as tanks, machinery, and piping shall be designed and operated to prevent electrostatic ignitions. All metallic equipment where an ignitable mixture could be present

shall be bonded or grounded. The bond or ground or both shall be physically applied or shall be inherently present by the nature of the installation. Any electrically isolated section of metallic piping or equipment shall be bonded or grounded to prevent hazardous accumulation of static electricity. All nonmetallic equipment and piping where an ignitable mixture could be present shall be given special consideration.”

- c. NFPA Code 30, section 6.5 Control of Ignition Sources states, “precautions shall be taken to prevent the ignition of flammable vapors by sources such as the following: open flames, lightning, hot surfaces, radiant heat, smoking, cutting and welding, spontaneous ignition, frictional heat or sparks, static electricity, electrical sparks, stray currents, ovens furnaces and heating equipment.”
- d. NFPA Code 30, section 21.8 Inspection and Maintenance of Storage Tanks and Storage Tank Appurtenances, requires that each tank constructed of steel be inspected and maintained per API [American Petroleum Institute] Standard 653 Tank Inspections, Repairs, Alterations, and Reconstructions, or STI [Steel Tank Institute] SP001, Standard for the Inspection of Aboveground Storage Tanks.
- e. NFPA Code 30, section 6.9.2 Inspection and Maintenance states that maintenance and operating practices shall be established and implemented to prevent and control leakage and spillage of ignitable (flammable or combustible) liquids.
- f. NFPA Code 30, section 6.9.4 Inspection and Maintenance states that ground areas around where liquids are stored, handled or used shall be kept free of weeds trash or other unnecessary combustible materials.

24. During the June 8-9, 2021 inspection, the EPA inspector issued a Notice of Preliminary Findings, noting failure to design and maintain a safe facility by not identifying intrinsically safe areas, having no electrical classification documentation, and not controlling ignition sources, as required by Section 112(r)(1) of the CAA.

25. To date, Respondent has failed to design and maintain a safe facility as it produces, processes, handles, and/or stores flammable chemicals that may result in flammable, or explosive conditions.

FINDINGS OF VIOLATIONS

26. The facts stated in Paragraphs 11 through 25 above are herein incorporated.

27. Based on the information available to EPA, EPA has determined that Respondent failed to comply with its general duty, pursuant to Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), by failing to identify hazards which may result from releases using appropriate hazard assessment techniques, and failing to design and maintain a safe facility, taking such steps as are necessary to prevent releases; and that such failures are violations of Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1).

ORDER FOR COMPLIANCE

28. Based upon the Findings of Fact and Conclusion of Law, and Findings of Violations set forth above, and pursuant to the authority of Section 113(a)(3)(B) of the CAA, 42 U.S.C. § 7413(a)(3)(B), Respondent is hereby ORDERED to take the actions described below.

29. Respondent shall take whatever actions are necessary to correct the violations cited above and comply with the requirements of Section 112(r)(1) of the CAA, 42 U.S.C. §7412(r)(1), in order to prevent any further accidental releases or fires, and to minimize the consequences of any release or fires that do occur, including, but not limited to, completion of the following compliance actions:

- a. *Short term actions.* Within 10 (ten) days of the effective date of this Order, Respondent must remove all ignition sources where flammable materials are handled or stored and from areas where flammable vapors may occur. Ignition sources include but are not limited to the operation and use of non-intrinsically safe equipment, tools, and electrical service.
 - b. *Compliance Plan.* Within fifteen (15) days of the effective date of this Order, Respondent must submit a plan describing how the facility intends to comply with the obligations of CAA § 112(r)(1). The plan must specifically describe how Respondent plans to assess hazards and alter the design, maintenance, and work practices of the Facility to be safe and comply with applicable NFPA and other codes and standards, including the following:
 - i. how any remaining ignition sources will be removed from flammable material storage and handling areas;
 - ii. proper grounding as per NFPA requirements (with independent testing/verification of ground) and bonding of all storage tanks containing flammable materials as well as any equipment used in or around areas where flammable materials are stored or handled;
 - iii. independent testing of the mechanical integrity of the storage tanks which contain flammable or otherwise hazardous materials;
 - iv. how and when the facility will conduct an assessment of hazards using appropriate hazard assessment techniques; and
 - v. any other measures the facility is taking to prevent further accidents including immediately evaluating and addressing the areal proximity of incompatible chemicals present at the facility.
30. The Compliance Plan shall include a proposed timeframe for each compliance action, but all compliance actions must be completed as soon as possible.
31. EPA will review and may provide comments on the Compliance Plan.

Submissions

32. Respondent must provide documentation of completion of these compliance actions to EPA within thirty (30) days of taking the actions described above. All documentation shall be submitted as directed below.

33. All submissions to EPA required by this Order shall contain the following certification signed by an officer of the Respondent:

I certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment. (Signature)

34. All submissions to EPA required by this Order shall be sent to:

Lorenzo Sena
Chemical Accident Prevention Section
Air Branch
Enforcement and Compliance Assurance Division
United States Environmental Protection Agency, Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219.
sena.lorenzo@epa.gov

35. All documents submitted by Respondent to EPA in the course of implementing this Order shall be available to the public unless identified as confidential by Respondent pursuant to 40 C.F.R. Part 2, Subpart B, and determined by EPA to merit treatment as confidential business information in accordance with applicable law.

General Provisions

36. This ORDER is deemed effective upon receipt by Respondent (the “Effective Date”).

37. Any violation of this Order may result in a judicial action for an injunction or civil penalties of up to \$102,638 per day per violation, or civil administrative action for penalties of up to \$48,192 per day per violation, or both, as provided in Sections 113(b)(2) and 113(d)(1) of the Act, 42 U.S.C. §§ 7413(b)(2) and 7413(d)(1), respectively, as well as criminal sanctions as provided in Section 113(c) of the Act, 42 U.S.C. § 7413(c). The EPA may use any information submitted under this Order in an administrative, civil, or criminal action.

38. Nothing in this Order shall relieve Respondent of the duty to comply with all applicable provisions of the Act or other federal, state or local laws or statutes, nor shall it restrict the EPA's authority to seek compliance with any applicable laws or regulations, nor shall it be construed to be a ruling on, or a determination of, any issue related to any federal, state, or local permit.

39. Nothing herein shall be construed to limit the power of the EPA to undertake any action against Respondent or any person in response to conditions that may present an imminent and substantial endangerment to the public health, welfare, or the environment.

40. The provisions of this Order shall apply to and be binding upon Respondent and its officers, directors, employees, agents, trustees, servants, authorized representatives, successors, and assigns. From the Effective Date of this Order until the Termination Date as set out below, Respondent must give written notice and a copy of this Order to any successors in interest prior to any transfer of ownership or control of any portion of or interest in Respondent's facility. Simultaneously with such notice, Respondent shall provide written notice of such transfer, assignment, or delegation to EPA. In the event of any such transfer, assignment or delegation, Respondent shall not be released from the obligations or liabilities of this Order unless the EPA has provided written approval of the release of said obligations or liabilities.

41. Nothing in this Order shall limit EPA's right to obtain access to, and/or inspect the Facility, and/or to request additional information from Respondent pursuant to the authority of Section 114 of the CAA, 42 U.S.C. § 7414.

42. Unless otherwise stated, all time periods stated herein shall be calculated in calendar days.

43. Respondent may seek federal judicial review of the Order pursuant to section 307(b)(1) of the CAA, 42 U.S.C. § 7607(b)(1).

Termination

44. This Order shall terminate one year after the Effective Date of this Order, or at the time that EPA determines that Respondent has achieved compliance with all the terms of this Order, whichever is earlier.

U.S. ENVIRONMENTAL PROTECTION AGENCY

Date: _____

Diane Huffman
Acting Director
Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency, Region 7

Date: _____

Raymond C. Bosch
Assistant Regional Counsel
Office of Regional Counsel
U.S. Environmental Protection Agency, Region 7

CERTIFICATE OF SERVICE

I certify that on the date noted below I hand delivered the original and one true copy of this Administrative Order for Compliance to the Regional Hearing Clerk, United States Environmental Protection Agency Region 7, 11201 Renner Boulevard, Lenexa, Kansas 66219.

I further certify that on the date noted below, I sent by electronic mail and by certified mail, return receipt requested, a true and correct copy of the signed original Order for Compliance, to:

Accounting & Tax Services Inc
Registered Agent for Manor Chemical Company, Inc.
5600 Morganford
St Louis, Missouri, 63116
TPOMO@AOL.com

And

Tracy Lindloff, Vice President
Manor Chemical Company, Inc.
6901 Heege Road
St. Louis, Missouri 63123
tracy.lindloff@manorchemical.com

Name

Date