US EPA Region 5
77 W. Jackson Blvd
Chicago, IL 60604

March 17, 2023

Attention to:

Michael Cunningham, RCRA Compliance Section 1 Email returned, forwarded to blough.james@epa.gov

cunningham.michael@epa.gov

Todd Ramaly, Hazardous Waste Identification - Recycling of Hazardous Waste
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Norberto Gonzalez, RCRA Permits - IL/IN/W
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Greg Chomycia, Risk Management Program
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Robert Smith, EPCRA Sections except Section 313 Email returned, forwarded to calvo.estrella@epa.gov
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Ginger Jager, Emergency Planning and Community Right-to-Know Act - IL
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Krista McKim, NPDES Permits-Stormwater
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Erik Kambarian, Illinois OSHA, Acting Division Manager
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RE: Carus LLC LaSalle Site, 1500 Eighth Street, LaSalle, IL 61301

I am a Chemical Engineer with a BS and MS in Hazardous Materials Management, a career EHS professional and a Certified Hazardous Material Manager (CHMM) Emeritus. I retired in January 2019 after 42 years with DuPont and a spin-off company, Axalta Coating Systems. Since May 2019, I have been the Sierra Club – Michigan Chapter, Toxics & Remediation Specialist, and volunteer nationally as a technical resource for communities impacted by releases of toxics to air, water and/or soil. I have been asked to review the impact(s) of the Carus LLC LaSalle Site, located at 1500 Eighth Street, LaSalle, IL 61301, because of a January 11, 2023 explosion and fire that has had a significant impact on the local community. As part of that review, several related issues have been revealed that require further investigation and possible regulatory oversight.

The following describes the related issues that were discovered, the basis for our concerns, and requested actions as they relate to the Carus LaSalle Site and related properties. These concerns cover a variety of environmental topics and media; therefore, this letter is being sent to

a broad EPA Region 5 distribution as well as Illinois OSHA. A detailed response is not required. The community simply needs to know that their concerns are being investigated and addressed.

1. Protection of the Community from Future Explosions – Carus LaSalle Manufacturing Facility

The Carus LaSalle Facility ["Facility"] uses, stores, and manufactures water reactive and oxidizing materials. Materials that exhibit these characteristics must be properly stored, managed and the Facility properly protected in the event of an incident or release. The Facility must also have required emergency response plans in place and must have exercised the plans.

The community has many concerns related to the explosion and fire at the Carus facility, the response, and future plans to prevent reoccurrence. Responsible parties must assure that all community concerns and questions outlined below are answered. To date, these concerns and question have gone unanswered.

- It is the community's understanding that Carus uses a very generic emergency response plan that provides little specific data about what is stored on site. Having effective emergency response plans and performing multi-agency response drills are very important for the protection of the local community in the event of a fire or other emergency. It is also important to the local first responders who have a right to know what they are walking into. There is a belief in the community that the response to this event was delayed and was not effectively implemented. The community has been unable to obtain a copy of the Facility emergency response plan but have been told that the plan is generic and covers approximately 36 facilities in the LaSalle area. A generic response plan would likely not include all required elements specific to the Facility such as, a list of chemicals stored, name of the facility emergency coordinator, evacuation plans, worst case scenario and populations likely to be affected, and exercising of the plan.

- The cause of the January 11, 2023 explosion and fire is yet to be determined or communicated. The surrounding community has not been told how the Facility will ensure that there will not be another fire there or at their off-site warehouses.

- Related to the above, one primary concern has been the movement of materials from the Carus site, first to the Apollo warehouse in LaSalle and then to a Lotz Logistics warehouse in Ottawa, Illinois. On February 24, 2023 the Ottawa Illinois Mayor and City Council posted a letter on Facebook stating that the Lotz Storage facility meets all necessary safety measures. This determination was reportedly made by the City's Fire Chief and Building official that have inspected the facility. While these assurances are welcome, the actual report from the inspection has not been made publicly available and community members have not been allowed to walk-through the warehouse. This warehouse is in a former mall and there are adjacent offices and office workers that have the right-to-know that the warehouse does not pose an imminent threat to them. Knowledge now that the Lotz warehouse is required to have CVI certified staff, indicating that the warehouse must comply with the Chemical Facility Anti-Terrorism Standards (CFATS) regulation, only increases the concerns of the local community.

- Most of the materials stored and manufactured at the Facility are solids that can become airborne during storage, handling, and use. The Occupation Safety and Health Administration (OSHA) explains that any combustible material can burn rapidly when in a finely divided form. If such a dust is suspended in air in the right concentration, under certain conditions, it can become explosible. The force from such an explosion can cause employee deaths, injuries, and destruction of entire buildings. Video of the fire as it began and several explosions followed, appears to indicate that combustible dusts may have either been cause or exacerbated the fire and explosions. Some of the dusts that are generated from Facility processes and product handling are combustible dusts. Any Facility emergency response plan must include consideration to a possible combustible dust explosion and fire.

Responsible parties must assure that all community concerns and questions are answered, including an assessment of the cause of the incident, providing copies of all Facility emergency response plans, descriptions of response training and multi-agency drills, plus a critique of the effectiveness of the response to the January 11, 2023 explosion and fire and methods to improve future responses. To date, these concerns and question have gone unanswered.

2. Applicability to CAA 112r Risk Management Program and OSHA's Process Safety Management Standard

There is information that indicates the Facility might be subject to the Clean Air Act (CAA) 112r Risk Management Program. Listed RMP chemicals determined to possibly be above threshold include Hydrochloric Acid ≥ 37% and Chlorine. The site also appears to be subject to OSHA's Process Safety Management Standard 29 CFR 1910.119. Both of these regulations/standards are meant to protect employees and local communities from significant releases of highly hazardous materials. In addition, the EPA ECHO detailed report for the Facility indicates that they have reported under NAIC Code 325181 Alkalies and Chlorine Manufacturing. Public Safety (430 ILCS 45) Illinois Chemical Safety Act is applicable to Alkalies and Chlorine manufacturing. The community does not know if the Facility has an up-to-date Chemical Safety Contingency Plan. The community has the right to know if the Facility is subject to and in compliance with the requirements of the cited rules.

- Information from the Carus LaSalle Facility EPCRA Tier II reporting years 2020 and 2021 indicates that the Facility stores Hydrochloric Acid. Reporting year 2020 indicates that they stored hydrochloric acid at a daily average of from 10,000 to 24,999 lbs and a maximum of from 25,000 to 49,999 lbs. Reporting year 2021 indicates that they stored hydrochloric acid at a daily average of from 10,000 to 24,999 lbs and a maximum of from 75,000 to 99,999 lbs. Neither the 2020 nor the 2021 reports indicate if the blend is ≥ 37% hydrochloric acid, however, the RY2020 Tier II report indicates that the hydrochloric acid they store is a "pure" liquid, while the RY2021 Tier II report indicates it is a liquid "mixture". The point is that, if the Facility uses Hydrochloric Acid ≥ 37% above threshold in a process, they must report that they are an RMP facility and confirm that they have required systems in place to assure safe handling and storage.

- The January 11, 2023 explosion and fire was initially reported as a release of chlorine from a tanker. One tanker can reportedly hold from 30,000 to 40,000 lbs of chlorine. These facts lead to many questions, including what was a tanker of chlorine doing at the Facility when there is no reports of them using, manufacturing, or storing Chlorine? None of the reports that are publicly available, such as the EPCRA Tier II reports or Toxic

Release Inventory (TRI), include chlorine above relevant thresholds. Chlorine has a 100 lb. reporting threshold for Tier II reporting and a 25,000 lb. TRI threshold for manufacturing, use, or processing and 10,000 lbs for otherwise used. Chorine has a threshold of 2,500 lbs in an RMP process and a 1,500 lb. threshold pursuant to the OSHA Process Safety Management Standard for highly hazardous chemicals, toxics and reactives. There are indications and information supporting that chlorine might be processed at the Facility and also is likely being used to treat wastewater. If this is true, the community has the right to know how much, how it is being used, and assurances that the appropriate safety systems are in place to continue to manage it.

3. Waste Characterization and Permitting

Some waste materials from the Site are reportedly disposed in a Carus-owned landfill, Disposal Area 3, in nearby Ottawa, IL. These wastes appear to be characteristic and toxic waste as defined in 40 CFR 261.21(a)(2) and 261.24(b) Table 1. The Ottawa, Illinois community would like to know how Carus has determined that the waste placed on land at Disposal Area 3 is not a hazardous waste and why they are not required to have a permit as an industrial solid or hazardous waste landfill.

- During the review of the fire at the Facility and impacts to the LaSalle community, associated concerns were expressed by the nearby Ottawa, IL community where Carus disposes of process wastes at a location identified as “Carus Disposal Area 3”. According to the EPA Compliance and Enforcement History Online (ECHO) and RCRAInfo websites, Disposal Area 3 is an NAIC 56212 Solid Waste Landfill located at 1325 N 2803rd Rd, Ottawa, IL 61350 with what is designated as an inactive RCRA ID IL0990808129. No other information or permits could be found that relate to this facility.

  The waste appears to be primarily comprised of manganese, which is flammable in its powder form and reacts slowly with water to produce flammable and explosive hydrogen gas. Carus has apparently determined that the waste placed into Disposal Area 3 is non-hazardous.

  According to the Site’s toxic release inventory (TRI) reporting year (RY) 2021 submittal, the following volumes of wastes were disposed at Carus Disposal Area 3, using the RCRA ID Number IL0990808129.

Characterization of Waste at Carus Disposal Area 3			
Waste Metal	**Weight Disposed**	**% of Total**	**Hazardous Waste Code (where applicable)**
Manganese	626,151	86%	NA
Mercury	42	0.006%	D009
Lead Compounds	1,061	0.15%	D008
Copper Compounds	27,951	3.85%	NA
Barium	60,616	8.35%	D005
Zinc	10,326	1.42%	NA

Characterization of Waste at Carus Disposal Area 3			
Waste Metal	**Weight Disposed**	**% of Total**	**Hazardous Waste Code (where applicable)**
Total TRI metals disposed in RY2021	**726,146**	**8%**	**% Haz waste**

This information appears to indicate that the mixture is or could be a hazardous waste. Disposal Area 3 should be assessed to confirm if they should be licensed as a hazardous waste landfill.

4. Potential for Waste Runoff to Surface Waters

Further investigation using Google Earth reveals that Disposal Area 3 appears to be an open, uncovered landfill or land disposal site, adjacent to the former, closed Carus Disposal Area 2. Both are very close to the Illinois River. There is a potential for the waste and/or leachate to enter surface waters and/or for particulate to become airborne and deposit into the River. The community would like to know why the Carus Disposal Area 3 is not required to have a stormwater or individual NPDES permit.

- The Illinois EPA (IEPA) requires a National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from industrial activities. Stormwater discharges associated with "Industrial Activities" are defined in 40 CFR 122.26(b)(14) as "the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant." Facilities that are considered to be engaging in "industrial activity" for purposes of paragraph (b)(14) includes 40 CFR 122.26(b)(14)(v) "Landfills, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under subtitle D of RCRA." Carus Disposal Area 3 appears to meet these criteria and should be covered under the IEPA General Permit for stormwater discharges from industrial activities.

5. Protection of the Ottawa Illinois Community

There is a potential for the wastes in Disposal Area 3 landfill to become airborne and therefore an inhalation health risk to the community as well as a risk for waste materials to be deposited on nearby surfaces, soil, and surface waters. In addition to daily hazards posed by the landfill, manganese powder poses a potential risk of explosions and/or fires. The Ottawa community has valid concerns about their health and safety and have the right to know 1) what is disposed in Disposal Area 3 and what are the associated hazards; 2) how Carus assures that there will be minimal particulate matter emissions from the landfill, and; 3) how Carus will prevent explosions and/or fires. Further, the community has the right to know if Carus has a proactive emergency response plan, specific to Disposal Area 3, that describes how they will protect the local community in the event of a fire or other emergency.

- In addition to the Illinois River, Carus Disposal Area 3 is very near Buffalo Rock State Park, the Naplate water tower, and LaSalle County Nursing Home. Naplate, IL is only about 1.5 miles southeast of the landfill and Ottawa, IL is less than 3 miles northeast, both in line with prevailing winds. Other popular tourist locations such as Starved Rock State Park, Starved Rock Nature Preserve, and the Hiawatha Pioneer Trail are within 5 miles of the landfill. These areas include vulnerable populations, protected parks and landmarks, and tourist areas that are important to the community. These communities need to know what the possible risks are and how they and the environment will be protected.

- The Carus Disposal Area 3 landfill appears to be a “facility: as defined in Emergency Planning, and Community Right-to-Know (EPCRA) Part 302.3 as “any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located.” This means that Carus should be reporting the materials in Disposal Area 3 annually into the State Tier 2 system.

As mentioned above, a detailed response is not required. However, a response that this communication has been received and that the described concerns have or will be investigated by the respective agency or division would be greatly appreciated. I am happy to further discuss any of the information in this communication and/or additional information that you may require. I am with the community for the long haul and until they get the answers they need and deserve.

Sincerely,

Denise Trabbic-Pointer, MS, CHMM Emeritus