

Chemical Manufacturing Ordinance Amendment

Request

Text amendment proposed by Planning staff in response to Public Works Committee concerns related to:

- Possible harmful impacts of chemical manufacturing to surrounding areas, particularly neighborhoods;
- Potential of chemical manufacturing to degrade nearby air and water quality as well as the built environment; and
- Possible mitigation of potential impacts of chemical manufacturing to off-site areas

Chemical Manufacturing Ordinance Amendment

Background

- The Winston Weaver Plant fire in early 2022 led staff to assess the City's current land use regulations for such facilities.
- Staff researched how NC peer cities address fertilizer plants through zoning restrictions and other requirements.
- Peer cities included Charlotte, Durham, Fayetteville, Greensboro, and Raleigh.

Chemical Manufacturing Ordinance Amendment

Current UDO Regulations

- Fertilizer plants are classified as chemical manufacturing based on North American Industrial Classification System (NAICS).
- Chemical manufacturing is one of 13 uses classified as “Manufacturing C,” only allowed in the most intensive General Industrial (GI) zoning district.
- Any use involving manufacture of hazardous materials prohibited within 1 mile of Salem Lake by watershed protection regulations.

Chemical Manufacturing Ordinance Amendment

Peer City Zoning Regulations

- Fertilizer plants only allowed in a community's heaviest Industrial district.
- Classified as some form of chemical or high impact/hazardous manufacturing.
- Additional Use Restrictions:
 - Special Use Permit Approval
 - Enhanced Setbacks from Residential
 - Perimeter Security Wall/Fence
 - Hazardous Materials Management Plan
 - Water Supply Watershed Restrictions

Summary Zoning Ordinance Requirements Affecting Fertilizer Manufacturing							
City	Allowed Only in Heavy Industrial District	Special Use Permit Approval	Enhanced Setbacks from Residential (feet)	Security Fencing/Wall Required (minimum height in feet)	Hazardous Materials Management Plan Required	Water Supply Watershed Restrictions	
Winston-Salem	Yes	No	No	No	No	Prohibited within 1 mile of source	
Charlotte	Yes	No	300	No	No	Not Found	
Durham	Yes	Yes	1,500	8	Yes	Spill Containment Plan Approval	
Fayetteville	Yes	No	1,000	No	Yes	Spill Containment Plan Approval	
Greensboro	Yes	Yes	500	8	No	Prohibited within 1/2 mile of source	
Raleigh	Yes	No	No	No	No	Not Found	

Chemical Manufacturing Ordinance Amendment

Proposed Use-Specific Standards

Chemical and Battery Manufacturing Uses within Manufacturing C:

- Permitted only in General Industrial (GI) District
- Approval Process
 - Requires approval of a Special Use Zoning District and accompanying site plan
 - Public hearings before Planning Board and City Council
- Compliance with all applicable Local, State and Federal Laws
 - Hazardous Materials Management Plan shall be submitted for approval as part of site planning process prior to issuance of a building permit

Chemical Manufacturing Ordinance Amendment

Proposed Use-Specific Standards

Chemical and Battery Manufacturing Uses within Manufacturing C:

- Water Supply Watershed Prohibition
 - Not allowed in designated public surface water supply watersheds such as Salem Lake
- Minimum Site Size – 25 Acres
- Minimum Setbacks
 - All facility operations: minimum perimeter setback of 400 feet
 - All parking areas: minimum perimeter setback of 200 feet

Chemical Manufacturing Ordinance Amendment

Proposed Use-Specific Standards

Chemical and Battery Manufacturing Uses within Manufacturing C:

- Security Fencing or Wall
 - A minimum 6-foot opaque fence or wall shall enclose all facilities associated with these uses from exterior property lines.
- Landscaping
 - Standard landscaping provisions shall apply
 - All street yard landscaping areas shall be located outside of security fencing or wall

Chemical Manufacturing Ordinance Amendment

Proposed Use-Specific Standards

No Use Separation Standard Recommended

- An established chemical/battery manufacturing use meeting all proposed standards could be rendered nonconforming if a new residential rezoning district is approved at a distance less than the specified use separation
- If the chemical/battery manufacturing use becomes nonconforming, then future expansion is limited to 25% of the existing facilities, through no action of the established chemical/battery manufacturing use

Chemical Manufacturing Ordinance Amendment

Proposal Summary

Chemical and Battery Manufacturing Uses within Manufacturing C:

- Permitted only in General Industrial (GI) District
- Requires Approval of a Special Use Zoning District
- Compliance with all applicable Local, State and Federal Laws
- Prohibited in Water Supply Watersheds
- Minimum Site Size: 25 acres
- Perimeter Setbacks: 400 feet for operations; 200 feet for parking
- Security Fencing/Wall: Minimum 6 feet in height
- Streetyard landscaping located outside security fence/wall

End of Presentation

Chemical Manufacturing Ordinance Amendment

Perimeter Setbacks and Suggested Minimum Site Size Table

Minimum Perimeter Facility/ Parking Setbacks (feet)	Perimeter Facility/ Parking Setback Minimum Acreage	Suggested Minimum Site Size Acreage	Maximum Buildable Facility Acreage without/with Maximum Parking Acreage at Minimum Site Size	Maximum Buildable Facility Acreage Percentage without/with Maximum Parking Acreage at Minimum Site Size
200/200	3.67/3.67	10; 15	6.33/6.33; 11.33/11.33	63%/63%; 76%/76%
250/200	5.74/3.67	12; 17	6.26/8.33; 11.26/13.33	52%/69%; 66%/78%
300/200	8.26/3.67	15; 20	6.74/11.33; 11.74/16.33	45%/76%; 59%/82%
350/200	11.24/3.67	20; 25	8.76/16.33; 13.76/21.33	44%/82%; 55%/85%
400/200	14.69/3.67	25; 30	10.31/21.33; 15.31/26.33	41%/85%; 51%/88%
450/200	18.60/3.67	27; 32	8.40/23.33; 13.40/28.33	31%/86%; 42%/89%
500/200	22.96/3.67	35; 40	12.04/31.33; 17.04/36.33	34%/90%; 43%/91%