Cedar Rapids Public Safety & Youth Services Committee

Fireworks

August 8, 2017
Assessment and Review of Fireworks Legalization in Cedar Rapids

- Review of Iowa Fireworks Law (Fire Marshal Vance McKinnon)
- Fire Incidents (Fire Chief Mark English)
- Emergency Medical Services Incidents, including injury reports (Fire Chief Mark English)
- Police Calls for Service (Police Captain Jeff Hembera)
- Other Issues (Utilities Director Steve Hershner and Community Development Director Jennifer Pratt)
- Recommendations (Fire Chief Mark English)
Iowa Fireworks Law

- Sale is allowed annually in a permanent building between June 1 and July 8 and between December 10 and January 3.
- Sale is allowed in a temporary structure annually between June 13 and July 8.
Iowa Fireworks Law

- To sell fireworks, a vendor must have a permit from the State Fire Marshal and an inspection by the Cedar Rapids Fire Marshal’s Office.
- Only first-class and second-class consumer fireworks may be sold in Iowa (labeled 1.4G – DOT classification or UN0336).
Warning on Fireworks Tents
Neighborhood Impact

Resident that discharges a firework that should have 70 feet clearance impacts 5 adjoining properties in typical Cedar Rapids neighborhood.
Neighborhood Impact

Resident that discharges a firework that should have 140 feet clearance impacts 9 adjoining properties in typical Cedar Rapids neighborhood.
Iowa Fireworks Law

• By state law, consumer fireworks can be set off from 9:00 a.m. and 10:00 p.m. on June 1 through July 8 and again between December 10 and January 3.

• Extended hours are allowed between 9:00 a.m. and 11:00 p.m. on July 4. Expanded hours are also allowed on Saturday and Sunday before and after July 4 during these times.
Iowa Fireworks Law

• Again, by state law, extended hours are allowed between 9:00 a.m. on December 31 through 12:30 am on January 1.

• Extended hours are allowed between 9:00 a.m. and 11:00 p.m. on the Saturday and Sunday before and after December 31.
Iowa Fireworks Law

- Fireworks must be discharged from real property, which means that they must be discharged from a property that a person owns or has the permission of the owner.

- Fireworks are not allowed in parks or other publicly owned locations without a permit from the Cedar Rapids Fire Department.

- An individual must be 18 years of age to purchase fireworks.
Iowa Fireworks Law

- Iowa SF489 allows cities to shorten the duration of the use or ban use within their jurisdictions.

- Cities have retained the right to regulate the use of fireworks within their borders and set a permitting process for local control on sales within parameters set by the state law.
Reported Incidents in Cedar Rapids
(Following State Code Dates and Times)

• Fire Department – 13 total incidents
• 4 medical calls
  – Asthma
  – 14-year old with serious burns
  – PTSD exacerbation resulting in suicidal ideation
  – elderly victim startled by fireworks with possible hip fracture
• A total of 9 fire-related calls
  – 3 building fires
  – 2 dumpster fires
  – fireworks thrown at house
  – fireworks discharged in cemetery
  – tree fire
  – hazardous device investigation
Building Fires

• Fire Department noted three incidents where fireworks contributed to building fires.
• Incident Number One:
  – On May 4, the property located at 411 G Avenue NW had a fire in a 2-stall detached garage.
  – In this incident, fireworks were detonated near garage and caused damage to the garage siding.
  – Estimated $1,500 loss
Building Fires

- Fire Department noted three incidents where fireworks contributed to building fires.
- Incident Number Two:
  - On June 4, the property located at 512 12th Street SE had a garage fire.
  - Juveniles where detonating fireworks prior to fire.
  - Estimated $35,000 loss
Building Fires

- Fire Department noted three incidents where fireworks contributed to building fires.
- Incident number three:
  - On June 19, the property located at 3455 Dalewood Avenue SE had a garage fire that spread to the house.
  - There is an estimated $140,000 of damage.
Injuries from Fireworks
Area Hospitals

- UnityPoint Health-St. Luke’s Hospital:
  - Reported 7 fireworks injuries during June 1 through July 8

- Mercy Medical Center (Since January) – 14 total patients:
  - Burn injuries – 9 patients
  - Lacerations – 1 patient
  - Head Injuries – 1 patient
  - Fractures – 2 injuries
  - Chest wall injury – 1 patient

(These are patients that presented at hospitals)
Injuries from Fireworks
Ambulance Transports

• Area Ambulance Service transported four patients with serious injuries as the result of fireworks.
Inspection & Permit Issues

• Identified 17 retailers that were selling fireworks without a permit.

• Identified a fireworks tent at 2140 Edgewood Road SW on June 28th that was selling fireworks without a Fire Department permit or inspection.

• Received 51 complaints from citizens regarding fireworks just in Fire Fire Marshal’s Office. Another 110 objections in the City Manager’s Office.

• 7 tents were set up without proper permits.
Police Calls for Service

- During the time period of June 1 through July 8, 2016 there were 166 Calls for Service where a Police Officer was dispatched.

- During this time period there were also 320 Computer Aided Dispatch messages sent to Police Officers by Dispatchers about fireworks problems.

- During the time period of June 1 through July 8, 2017 there were 372 Calls for Service.

- During this same time period there were also 576 Computer Aided Dispatch messages sent to Police Officers by Dispatchers about fireworks problems.
Police Calls for Service During Illegal Hours

- There were nearly four times as many police calls for service during illegal hours in 2017 compared to 2016.

<table>
<thead>
<tr>
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<th>HOURS ILLEGAL</th>
<th>COMPLAINTS</th>
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<tr>
<td>2016</td>
<td>912</td>
<td>486</td>
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<tr>
<td>2017</td>
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Date Range: June 1 - July 8
Police Calls for Service

- Dispatchers answered over 500 phone calls from citizens about fireworks during legal hours from June 1 – July 8, 2017. An officer was not dispatched unless there was a safety concern.

- There were 30,322 total calls to the dispatch center from June 1 through July 8, 2016.

- There were 33,247 total calls to the dispatch center from June 1 through July 8, 2017.
Shots Fired Calls

- There were 33 Police Calls for Service where dispatch received a report of shots fired that was likely fireworks. These were reports of shots fired between June 1 – July 8, 2017.

- There were two actual shooting incidents in which some citizens advised that they did not call 911 because they thought it was fireworks.
Citations Issued for Fireworks
(June 28-July 2, 2017)

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<tr>
<th>DATE</th>
<th>LOCATION</th>
<th>SITUATION</th>
<th>RESULT</th>
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<tbody>
<tr>
<td>6/28/2017</td>
<td>2600 16TH AVE SW</td>
<td>FIREWORKS BEING THROWN FROM VEHICLE ON CITY STREET.</td>
<td>1 PERSON CITED</td>
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<tr>
<td>6/29/2017</td>
<td>1400 SEMINOLE VALLEY RD NE (SEMINOLE VALLEY PARK)</td>
<td>FIREWORKS BEING SET OFF IN CITY PARK AFTER HOURS.</td>
<td>1 PERSON CITED</td>
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<td>7/1/2017</td>
<td>3000 J ST SW (CEDAR VALLEY APARTMENTS)</td>
<td>FIREWORKS BEING SET OFF IN PARKING LOT OF COMPLEX AFTER 11 PM.</td>
<td>4 PEOPLE CITED</td>
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<td>7/2/2017</td>
<td>2ND AVE SE / 3RD ST SE</td>
<td>FIREWORKS BEING THROWN FROM VEHICLE ON CITY STREET</td>
<td>1 PERSON CITED</td>
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</table>

7 citations issued during legal fireworks period
Law Enforcement Issues

- Challenging to enforce fireworks during periods in which fireworks are "legal" – difficult to discern legal versus illegal fireworks
- Officers were dispatched to fireworks incidents primarily after permitted hours
- No law against children discharging fireworks
Other Issues
Other Issues

Emails or phone calls were received detailing the effect of fireworks on pets, veterans with stress disorders, and children. There was also concern about noise and debris on private property.
Other Issues

Two soil samples taken on July 5th showed detectable results for perchlorate (0.53 mg/kg and 6.31 mg/kg). One sample location between wells #17 & 18 has been sampled yearly since 2013 and results range from no detect to 0.54 mg/kg.

The other location in the same vicinity was tested in 2013 and had no detect for perchlorate, but this year it recorded a result of 6.31 mg/kg. This same location was heavily utilized this year for public fireworks and the picture provides evidence of debris found in this area.
# Air Quality Issues

## PM$_{2.5}$ Hourly Concentrations based on the National Air Quality Index

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### AQI Category
- **Good** ($\leq 12.0$ mg/m$^3$)
- **Moderate** ($12.1-35.4$ mg/m$^3$)
- **Unhealthy for Sensitive Groups** ($35.5-55.4$ mg/m$^3$)
- **Unhealthy** ($55.5-150.4$ mg/m$^3$)
- **Very Unhealthy** ($\geq 150.5$ mg/m$^3$)
Safety and Aesthetics

• Complaints about tents in commercial corridors and neighborhood centers.
• Sales could be restricted to industrial-zoned properties only.
Lessons Learned

Fireworks are legal in the state of Missouri. However, urban areas ban the use of fireworks, including:

- Kansas City (459,787)
- St. Louis (319,294)
- Springfield (159,498)
- Columbia (108,500)
- Jefferson City (43,079)
Recommend Ban on Fireworks

- Fireworks in densely populated communities put citizens at risk for more fires and injuries.
- Noise, debris on other people’s property, and other complaints were significant neighborhood issues.
- A ban is the most effective means of enforcing fireworks laws and is preferred by public safety.
- Most large cities have banned fireworks.
- Recommend restricting fireworks sales to industrial-zoned property has withstood legal challenge and is an effective means for mitigating safety and aesthetics issues.
Law Enforcement Strategy with Fireworks Ban

- Hire back teams of Police Officers to address fireworks related issues.
- Police Officers would be dedicated to responding to and investigating fireworks complaints.
- Officers can investigate and file charges.
- The Police Department is working toward making fireworks violations ECCO (Electronic Citation Component for filing citations) compliant to expedite citation process.
- SAFE-CR program can assist with noise disturbance complaints and repetitive calls for service
Questions?