

# GREENWOOD NATURAL GAS EXPLOSION

**MARCH 9, 2016**

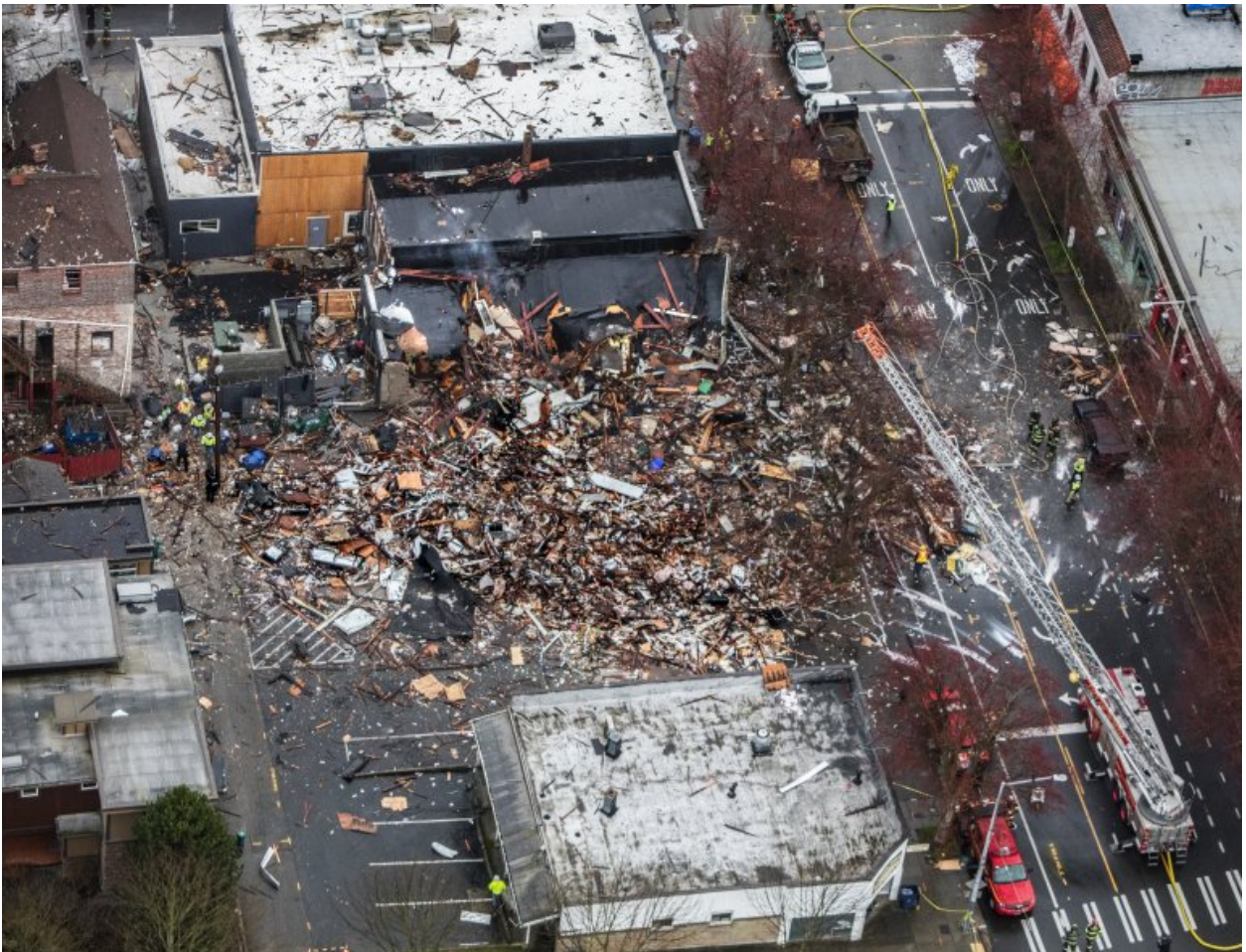


Photo: Q13FOX



# TABLE OF CONTENTS

- 1. Executive Summary .....1-1**
  - 1.1 Acknowledgements ..... 1-1
- 2. Incident Review.....2-2**
  - 2.1 Event Review .....2-2
  - 2.2 Objectives and Actions .....2-3
- 3. Actions Demonstrating Success.....3-5**
- 4. Challenges and IMPROVEment Plan Items.....4-6**
  - 4.1 Improvement Item #1: EOC Activation.....4-6
  - 4.2 Improvement Item #2: Neighborhood Impact Assessment .....4-6
  - 4.3 Improvement Item #3: Hazardous Material Safety .....4-6
  - 4.4 Improvement Item #4: Generic City Press Release Template .....4-7
  - 4.5 Improvement Item #5: Multi-Department Training for Unified Command .....4-7
  - 4.6 Improvement Item #6: City Command Vehicle .....4-8
  - 4.7 Improvement Item #7: Staging Areas.....4-8
  - 4.8 Improvement Item #8: Branded Clothing for City Staff .....4-8
- 5. Appendix 1 – List of Participating Agencies.....5-10**
- 6. Appendix 2 – Event Evaluations .....6-11**
  - 6.1 Did the City Accomplish the Following Objectives: .....6-11
  - 6.2 Rate the following activities on a scale from 1-5 (1-Low; 5-High).....6-12

## 1. EXECUTIVE SUMMARY

Following a natural gas explosion in the Greenwood neighborhood on March 9, 2016 weeks of public, private, and multi-agency coordination took place to address the impacts of the incident. This report is the product of individual interviews, an after action meeting, and a survey of many City departments and agencies to learn what was done well to coordinate assistance and what could be improved. Separate reports were compiled by the Seattle Fire Department regarding their on scene response and by the Unified Command group about their field response.

### 1.1 Acknowledgements

From the Seattle PI: “Speaking from a modest office with a spectacular view above Fisherman’s Terminal, Slattery praised the city of Seattle for being “absolutely golden” throughout. He said Mayor Ed Murray personally assured him and others impacted by the blast that help would be available when they need it, and that city workers have delivered on the mayor’s promise.” Michael Slattery, Property Owner. – April 18, 2016

From the Seattle Times: “The heroic first responders risked their lives to try and prevent what happened. The next wave of firefighters and police kept everyone safe and informed, and worked tirelessly to communicate what was happening in a calm and polite manner to all the people desperate for information. And then the community came out. This was the neighborhood looking to help in any way it could. All of Seattle should take notice of how special that is. In the midst of this great cultural change we are feeling, we witnessed firsthand how the citizens of Seattle came together and showed who we really are at our core. The list of incredibly kind and selfless acts that have occurred in Greenwood in the past 10 days could fill a book. From Rachael at Coyle’s Bakeshop baking cookies in her damaged store for first responders, to Tobey from Emerald City Karate allowing 50 muddy sets of feet in his space for the hourly update meetings, to the customer who called my café at 9 p.m. and offered to come down and help clean up because she loves what we do, everyone was there to support the community. The transcendent Phinney Neighborhood Association and several other fundraising efforts have pulled together more than \$150,000 (\$245,000 at the time of this report) for small business relief efforts. Urban Hands brought out 150 volunteers last weekend to clean, paint, landscape and decorate the impacted area and then go patronize the businesses. When disaster strikes, we rise up and band together. I’ve never been prouder of my neighborhood.” Chris Maykut, Owner Chaco Canyon Organic Cafes. – March 18, 2016

## 2. INCIDENT REVIEW

### 2.1 Event Review

On March 9, 2016, the Seattle Fire Department responded to a report of the smell of natural gas near Greenwood Avenue North and North 85<sup>th</sup> Street. As firefighters were searching for the source of the leak an explosion occurred around 1:40 a.m. Nine firefighters were injured, transported to the hospital, treated and released. More than 70 firefighters responded to the explosion and remained on scene throughout the day to watch for fires.

One building was completely destroyed displacing three businesses (Mr. Gyros, Neptune Coffee, and Quick Stop market). An adjacent building was heavily damaged, displacing a fourth business (G&O Cyclery). Other nearby buildings across the street, across the alley and to the south of the explosion site sustained damage such that two businesses are temporarily displaced (Insurrection and BFI), two businesses were forced to close for several months (Gorditos and Angry Beaver), and 13 residents of the Gorditos apartments were displaced. Additional businesses were impacted to varying degrees, including minor structural damage and shattered windows. All impacted businesses, 54 in total, had to close their doors from between a few hours to 8 months. Damage was initially estimated at \$3 million, which does not include lost revenue and wages.

Command of the incident was transferred to SPD Captain O’Donnell who set up the Mobile North Precinct Vehicle at the site. SDOT, SPU, and SCL worked together on transportation and utility issues in conjunction with Puget Sound Energy and the Washington Utilities and Transportation Commission who were investigating the cause of the natural gas leak. It was not clear until the end of the day that there was an apartment building that had been red-tagged and the residents displaced.

OED and DoN began working with businesses that had been impacted – directly in the field, through information posted on their City websites, and via fliers made available throughout the neighborhood. OEM helped set up the process with the Small Business Administration to declare a disaster and provide assistance to businesses and property owners for uninsured or underinsured damage and lost revenue.

On Thursday, March 10, three staff members from OEM accompanied Kiersten Grove from the Mayor’s Office to the site to help identify and clarify site management issues. Unified Command was established with City Departments, PSE, L&I, and other agencies. That afternoon, Kiersten assembled departments to get status updates on progress at the site. OEM coordinated subsequent daily meetings. DoN produced daily status reports that included information from the coordination meetings and individual agency updates.

Phinney Neighborhood Association, a local non-profit agency, collected donations to help the employees of the businesses, business owners, and displaced residents. This included a spontaneous GoFundMe site and a number of charitable actions from local businesses and residents.

Incident Command transitioned to Unified Command with Captain McDonagh of the East Precinct providing leadership. The Mobile Precinct went back into service in the North Precinct and was replaced by the SPD Command vehicle. Unified Command consisted of SPD, SDOT, DoN, OED, SDCI and SPU.

On March 16, the City established a Recovery Office at Works Progress on 85<sup>th</sup> Street staffed by personnel from the Office of Economic Development and Department of Neighborhoods and operated until March 25.

## 2.2 Objectives and Actions

The following objectives were modified over the four weeks of coordinating recovery activities in conjunction with the needs of the operational period. For instance, Objective 2 was originally, “Provide ongoing support to the Greenwood Incident Command team by identifying and filling needed positions to support the incident.” It adjusted to, “Transition from Unified Command to a Recovery Task Force” and finally ended as stated below.

- 1. Ensure the needs of residents of the Gorditos Apartments are being met**
  - 1.1. Identify and address all issues that would allow residents to reoccupy the apartments. (ALL)
  - 1.2. Ensure that the building owner has information and access to available resources to complete repairs so that the building can be safely reoccupied. (DCI, DoN)
  - 1.3. If apartments cannot be occupied for an extended period, help ensure residents are connected to information about other options. (DoN, HSD)
  - 1.4. Determine on Tuesday, March 15, whether other agencies may have other housing resources available. (ALL)
  
- 2. Continue multi-agency coordination through Recovery Task Force calls and temporary in-field office**
  - 2.1. The following departments and agencies will continue to discuss issues and progress: Mayor’s Office, SDOT, OED, DCI, DoN, SPU, SCL, CAO, Risk Manager, PSE, HSD, Red Cross, PNA, CSB, FAS. OEM will facilitate daily conference calls at 9 a.m. the week of 3/14 through 3/18. (OEM)
  
- 3. Restore access to all transportation routes affected by the explosion**
  - 3.1. Complete opening of all closed or partially closed roads to traffic. (SDOT)
  - 3.2. Provide access to sidewalks for pedestrians and for access to local businesses. (SDOT)
  - 3.3. Ensure transit stops are easily accessible and transportation information is available. (SDOT)
  - 3.4. Ensure the ROW has a unified and organized appearance. (SDOT)
  - 3.5. Ensure detours for all modes are appropriately posted. (SDOT)
  - 3.6. Ensure PSE has obtained all proper permits. (SDOT, DCI)
  - 3.7. Work with PSE to restore alley access. (SDOT)
  
- 4. Ensure that the needs of affected businesses are being met and addressed**
  - 4.1. Ensure that all businesses have completed required documentation for SBA assistance. (OED)



- 4.2. Communicate assistance available from government and private sources to affected businesses, including connecting businesses to L&I for asbestos advice. (OED)
- 4.3. Begin communication thanking businesses that have provided assistance. (MO, OED)

**5. Provide clear communication to the neighborhood**

- 5.1. Develop regular site signage and contact information sheets. (DoN)
- 5.2. Develop regular updates for neighborhood groups and publications. (DoN)



### 3. ACTIONS DEMONSTRATING SUCCESS

- The needs of the neighborhood were met in a variety of ways: expedited permitting, donations managed by Phinney Neighborhood Association directed to affected business employees and apartment residents, American Red Cross assistance, community clean up, etc.
- A strong community connection was evident, e.g. the karate school opening up a space for responders to meet.
- The response was well coordinated for a multi-department, as well as multi-incident, event (explosion and March 13 windstorm).
- Conference calls were effective for coordinating among departments.
- OED and DoN were successful as the “face” of the City to the community.
- Setting up a physical Recovery Center was a good step. Though not heavily used, it sent a positive message to the community and provided a continued City presence after field response wrapped up.
- SDCI Housing Ordinance Specialist was helpful in working with the apartment building owner on when residents should be able to expect to return to their apartments.
- CSB benefitted from being able to refer to and direct residents and businesses to the DoN and OED websites, respectively.
- Field response by SDOT, SFD, and SPD was effective in handling early issues, such as traffic re-routes, establishing perimeters, etc.
- SPD established clear field objectives that balanced restoration needs with investigation needs.
- Responders ordered food from local businesses, which sent a positive message and generated income in the neighborhood.
- SPD’s command vehicle was a very useful work space for multiple city departments. For example, SDOT was able to use it to coordinate with division directors.
- The Human Services Department determined the impacts to the residents displaced from the damaged Gorditos Apartment building and coordinated assistance between the American Red Cross, the Phinney Neighborhood Association, and the Seattle Department of Construction and Inspections tenant displacement assistance.
- The Phinney Neighborhood Association demonstrated their strength in neighborhood recovery and ability and willingness to serve their community. They had many connections with local businesses and residents that proved helpful and coordinated very effectively with city efforts. Their fund-raising, organization of a work party, and care for the residents, merchants, and business employees was exemplary.
- SDOT expedited the granting of a street use permit so that SPU could quickly install a fire service in a building near the impacted area.
- FAS expedited review and signing of lease agreement allowing for the quick occupancy and opening of the Neighborhood Recovery Center.

## 4. CHALLENGES AND IMPROVEMENT PLAN ITEMS

### 4.1 Improvement Item #1: EOC Activation

Aspects of the response and recovery operation would have benefitted from an activation of the Emergency Operations Center. Many of those aspects were addressed through alternate means (such as the daily multi-department coordination conference calls, the locating of resources needed at the Command Post such as a Safety Officer or PIO by OEM staff, the coordination between the Human Services Department, American Red Cross and Phinney Neighborhood Association, and the Snap Shot summaries of the coordination calls produced by the Department of Neighborhoods). It took, however, a full day to become aware of the needs of dislocated apartment residents, although this information had been requested. While the Fire Department did not need assistance from the OEM Staff Duty Officer during their response phase, there was plenty of coordination necessary in the days that followed. An EOC activation would have enabled a number of other issues to be more effectively addressed: understanding risk management and legal issues, tracking of costs, maintaining situational awareness, and transferring more seamlessly command from one agency to another.

**Recommendation:** Activate the Emergency Operations Center until all departments are certain that the circumstances of the incident can be adequately handled through alternate means (e.g. coordination calls) or within normal daily operations.

**Lead Agency:** Office of Emergency Management

**Due Date:** Complete

### 4.2 Improvement Item #2: Neighborhood Impact Assessment

The impacts to businesses and residents could have been better tracked. For example, the Department of Neighborhoods used a Google map and hand-marked it to record business damage. The Seattle Times created its own graphic though not entirely accurate. The City was relying on Phinney Neighborhood Association to corroborate an Excel spreadsheet of business names, addresses and owners.

**Recommendation:** Explore a mapping tool that could incorporate multiple data layers, such as census data, structural advisory tags, power, utilities, street closures, etc.

**Lead Agency:** Office of Emergency Management with the assistance of GIS staff in the Seattle Information Technology Department.

**Due Date:** Add to the annual update of the City-Wide Emergency Management Strategic Plan at its next revision.

### 4.3 Improvement Item #3: Hazardous Material Safety

There was a lack of clarity and assistance in identifying who could (and should) provide asbestos safety information for business owners, residents, public safety personnel, utility workers, and others working



at the site. Eventually, safety officers from Seattle Public Utilities, Seattle Department of Transportation, and Seattle City Light provided assistance to the Command Post.

**Recommendation:** Create a roster of qualified safety personnel from the City who can be called upon in situations like this to provide safety advice to all concerned. Include instructions about when such advice should be provided by other agencies. Include what level of training or credentialing these individuals should have.

**Lead Agency:** Office of Emergency Management with the assistance of the Seattle Human Resources Department and the Strategic Work Group.

**Due Date:** Add to the annual update of the City-Wide Emergency Management Strategic Plan at its next revision.

#### 4.4 Improvement Item #4: Generic City Press Release Template

Public Information Officers were pulled in from various departments to provide PIO services at the Command Post but came with their own departmental press release templates. There was not easy access to a general City of Seattle press release template for them to use.

**Recommendation:** Create a generic City of Seattle press release template that can be used in multi-department response and recovery efforts at similar incidents. Also, consider asking all PIOs to maintain a current version of the JIC News Release template on their respective department shared drives. As O365 and SharePoint Online are rolled out, consider building a site for PIOs to access in these situations.

**Lead Agency:** Office of Emergency Management with the assistance of the Mayor’s Office.

**Due Date:** Complete. The new template is saved on the EOC shared drive.

#### 4.5 Improvement Item #5: Multi-Department Training for Unified Command

Since the inception of the National Incident Management System in the early 2000s hundreds of City employees have taken on-line and in-person Incident Command System classes. A specific concept of field coordination when there is more than one agency responsible for aspects of the response is called Unified Command where agencies share in the responsibility for the event and jointly develop a common set of objectives. Though multi-agency coordination clearly did occur and after getting off the ground actually excelled, this incident highlighted the benefit of teaching specifically the concept of Unified Command to multi-agency and multi-department staff. Departments not traditionally associated with a strong field presence at incident scenes played very important roles, specifically the Department of Neighborhoods and the Office of Economic Development.

**Recommendation:** Develop and host multi-department and multi-agency Unified Command classes pre-identifying those departments and agencies who would most benefit from the training.

**Lead Agency:** Office of Emergency Management with the assistance of the Disaster Management Committee.

**Due Date:** Add to the annual update of the City-Wide Emergency Management Strategic Plan at its next revision.

## 4.6 Improvement Item #6: City Command Vehicle

The two vehicles provided by the Seattle Police Department to house Unified Command staff were very instrumental in providing a work space directly at the site for staff, a clear indication of presence to the community at large, and protection from the elements (heavy rain and a windstorm). These are expensive assets to purchase and maintain but many staff from all departments, as well as community members, were clearly appreciative of having them available.

**Recommendation:** Identify similar City assets as the North Precinct Mobile Command vehicle and the SPD Command vehicle and discuss their use in similar incidents in the future.

**Lead Agency:** Office of Emergency Management with the assistance of the Strategic Work Group.

**Due Date:** Add to the annual update of the City-Wide Emergency Management Strategic Plan at its next revision.

## 4.7 Improvement Item #7: Staging Areas

There was a need to stage a variety of vehicles and equipment in order to investigate the incident, set up lighting, re-direct traffic, establish command, etc. There was an equal interest in being sensitive to the needs and approvals of private property owners.

**Recommendation:** Review the process for identifying staging areas, as well as the guidelines for use of rights-of-way for vehicle staging.

**Lead Agency:** Seattle Department of Transportation with the assistance of the Strategic Work Group.

**Due Date:** Add to the annual update of the City-Wide Emergency Management Strategic Plan at its next revision.

## 4.8 Improvement Item #8: Branded Clothing for City Staff

Police officers and firefighters are easily identified as such by the uniforms they wear, as are Transportation and Utility crews by the hardhats and other jackets they wear. For departments that do not have as frequent a field presence, such as the Office of Economic Development or the Department of Neighborhoods staff needed more than a business card and City identification card to identify them to the public.

**Recommendation:** Departments should consider investing in the appropriate outerwear for their employees who may be assigned to field operations so that they can be clearly identified by the public.

**Lead Agency:** This will be left to the individual departments' discretion.

**Due Date:** No specific due date.



## 5. APPENDIX 1 – LIST OF PARTICIPATING AGENCIES

Mayor's Office (MO)  
Department of Neighborhoods (DoN)  
Office of Economic Development (OED)  
Seattle Department of Transportation (SDOT)  
Seattle Department of Construction and Inspections (SDCI)  
Seattle Public Utilities (SPU)  
Seattle City Light (SCL)  
Human Services Department (HSD)  
Office of Emergency Management (OEM)  
Seattle Fire Department (SFD)  
Seattle Police Department (SPD)  
Department of Finance and Administrative Services (FAS)  
    Customer Services Bureau (a division of FAS) (CSB)  
    Risk Management (a division of FAS)  
City Attorney's Office (CAO)  
American Red Cross  
Phinney Neighborhood Association (PNA)  
Puget Sound Energy (PSE)  
Department of Labor and Industries (L&I)  
Washington Utilities and Transportation Commission (WUTC)

## 6. APPENDIX 2 – EVENT EVALUATIONS

The Office of Emergency Management and the Department of Neighborhoods sent out a Survey Monkey to the City Departments and other agencies (PSE, American Red Cross, PNA) that were involved in the response to evaluate how well the objectives of the incident were met. The following is a summary of the results of that survey. Twenty-nine people responded.

### OEM/DON SURVEY RESULTS

#### 6.1 Did the City Accomplish the Following Objectives:

Objective 1: Ensure the needs of residents of the Gorditos Apartments are being met  
Yes: 20  
No: 1

Objective 2: Providing support for the Greenwood Incident Command team which eventually transferred to a recovery taskforce.  
Yes: 18  
No: 0

Objective 3: Restore access to all transportation routes affected by the explosion  
Yes: 21  
No: 0

Objective 4: Ensure that the needs of affected businesses are being met and addressed  
Yes: 22  
No: 0

Objective 5: Provide clear communication to the neighborhood  
Yes: 17  
No: 1

Unity of effort was achieved in coordinating activities related to this event.  
Yes: 23  
No: 1

**6.2 Rate the following activities on a scale from 1-5 (1-Low; 5-High)**

Coordination between responding City Departments	4.1
Coordination with Phinney Neighborhood Association	4.4
Coordination with Puget Sound Energy	4.2
Coordination with American Red Cross	4.3
Coordination with investigatory agencies (NTSB, WUTC)	4.0
Coordination with the media	4.2
Support to businesses to apply for SBA loan assistance	4.3
Coordination with businesses on all other matters including access, information, etc.	3.8
Identification of budget implications & responsibilities	3.1
Site signage and contact information sheets were clear and helpful.	3.8
Community members had a central point of contact to get information	4.3