



CCSF Response to the Civil Grand Jury Report

*“A Fluid Concern: San Francisco
Must Improve Fuel Resilience”*

Deputy City Administrator Jennifer Johnston
September 30, 2021

CCSF Agency Joint Response

Comprehensive joint response coordinated through the Mayor's Office, on behalf of City agencies identified for response:

- Department of Emergency Management (DEM)
- Mayor's Office
- City Administrator/General Services Agency (GSA) Offices
 - Office of Resilience and Capital Planning (ORCP)
 - Central Shops/Fleet
 - Office of Contract Administration (OCA)
- Public Utilities Commission (SFPUC)
- Department on the Environment (ENV)

Includes responses to the Findings and Recommendations requiring Board of Supervisors response as well:

- Findings #3, 4, 18 and 19; and
- Recommendations #9, 17 and 18

Responses to the Findings

Agreed/General Concurrence

Findings #1, 2, 7, 11, 12, 13, 19, 20 & 21

Partially Disagreed

Findings #3, 5, 6, 8, 10, 14 & 17

Wholly Disagreed

Findings #4, 9, 15, 16 & 18

(Underlined numbers in italics are Findings assigned to the Board of Supervisors for response as well)

Findings Requiring BOS Response

Finding		CCSF Agency Joint Response	
F3	The City's lack of agency sponsorship and dedicated staffing and budgeting for fuel resilience efforts weakens its ability to ensure fuel resilience in an emergency.	Disagree partially	While we agree that we can always dedicate more resources to improve fuel resiliency, there is and continues to be agency sponsorship on fuel resilience. Over the last 16 months, other emergency planning efforts had to be paused to respond to the unprecedented COVID-19 pandemic. Although further emergency planning was paused, San Francisco's existing emergency response plans remained in place and the City was (and is) prepared to respond to an earthquake or other natural disaster.
F4	The cessation of fuel resilience progress during COVID indicates that the City is not prioritizing fuel resilience comparably to other aspects of lifeline resilience.	Disagree wholly	The COVID-19 pandemic was and continues to be the world's most significant emergency within the last century. San Francisco's response to COVID-19 prevented countless immediate deaths and sicknesses of residents and guests. Emergency managers who were generally engaged in fuel resilience planning were wholly engaged in the City's COVID-19 response. Even with the COVID-19 pandemic, San Francisco remained prepared to implement its emergency response plans in the event of an earthquake or other natural disaster. There is no correlation between the City's focus on COVID-19 response and its commitment to fuel resilience.
F18	The lack of fuel resilience-related line items in the 2019 and 2021 Capital Plans indicates that the City is not prioritizing fuel resilience comparably to other aspects of lifelines resilience.	Disagree wholly	Unlike other lifelines like water and wastewater, the City does not own fuel infrastructure, such as refineries, pipelines, pumping stations and terminals. Given different infrastructure ownership structures, the Capital Plan should not be used to compare relative levels of priority for lifelines resilience. Priority City investments for fuel resilience may be for non-capital items and therefore not reflected in the Capital Plan.
F19	Progress on fuel resilience has been impeded by the lack of a dedicated, reliable funding source.	Agree	

Responses to the Recommendations

Two Recommendations have already been implemented: #1 & 3

Seven Recommendations will be implemented no later than winter 2023: #2, 4, 5, 6, 10, 14 & 15

Eight Recommendations require further analysis: #7, 8, 9, 11, 17, 18, 19 & 20

Three Recommendations will not be implemented: #12, 13 & 16.

(Underlined numbers in italics are Findings assigned to the Board of Supervisors for response as well)

Recommendations Implemented/To Be Implemented

#	Recommendation	Response
R1	The Mayor's Office should determine an appropriate agency sponsor for the Fuel Working Group by December 2021.	Has been implemented - The City Administrator's Office has been designated as the sponsor of, and lead agency for, the Fuel Working Group ("FWG").
R2	The Fuel Working Group should be reconvened by its agency sponsor by February 2022. The working group should meet at least quarterly thereafter.	Will be implemented in the next 60 days .
R3	The agency sponsor of the Fuel Working Group should select members with strong experience in supply chain logistics and emergency management. The Department of Emergency Management, the Office of Contract Administration, the City Administrator's Office, and other City departments who are significant users of fuel, including SFPUC, SFMTA, and DPW should dedicate staff time each month through December 2024, or until the subsequent recommendations in this report are implemented.	Has been implemented.
R4	By December 2022, the Department of Emergency Management should compile an inventory of generators critical to life safety in the City and their locations, portability, fuel needs, tank storage capacities, and burn rates. This inventory should be updated at least annually thereafter. The inventory should include information including generator location, fuel type, connection type, and any access codes needed for emergency delivery.	Will be implemented by December 2022 .
R5	By June 2023, the Department of Emergency Management should perform a team exercise to estimate likely ranges of fuel usage for critical generators in the City's inventory in the aftermath of a plausible disaster in which those usage needs would have to be met from local sources. The exercise should give lower and upper bounds stemming from possible variations in which generators would have to run and for how long.	Will be implemented by June 2023 .
R6	By December 2023, the Department of Emergency Management should develop and test a plan for the quick assessment of local fuel reserves available to City agencies in a disaster, including protocols that ensure incident commanders can assess emergency fuel supply and demand in real-time citywide.	Will be implemented by December 2023 .
R10	By December 2022, the Office of Contract Administration should prepare a supply chain vulnerability assessment of the City's two contracted fuel suppliers.	Will be implemented by June 2022
R14	By December 2023, the Department of Emergency Management, the Office of Resilience and Capital Planning, and the Port should prepare a seismic vulnerability assessment of likely delivery sites for emergency fuel delivery by water, including Pier 96, Pier 80, Pier 50, and at least one alternative delivery site.	Will be implemented this fall 2021 .
R15	By December 2022, the Department of Emergency Management should publish an analysis of the priority routes determining whether they will allow sufficiently reliable refueling of critical backup generators and fleet vehicles.	Will be implemented by December 2022 .

Recommendations Requiring Further Analysis

#	Recommendation	Response
R7	By December 2023, the City should build, retrofit, or purchase a minimum of two additional tanker trucks that can each extract up to 2,500 gallons of fuel from a tank, even in the absence of grid power, and transport it to where it is needed. These vehicles should have the ability to transport both gasoline and diesel fuel.	Central Shops is currently in the process of building one tanker truck to support refueling of critical vehicles and generators. This will supplement the existing SFFD fuel tanker truck and the one that is being purchased by the Department of Public Works. Further analysis is needed to determine the number of tanker trucks needed, the availability of additional tanker trucks if mutual aid can be exercised, and available funding. Further analysis will be completed by January 2023 .
R8	By December 2022, the City should enter into Memoranda of Understanding or contracts with a minimum of two local private gas station operators to ensure that emergency vehicles can access fuel stored at their stations, including making that fuel technically accessible even in the event of a grid power outage. The operators chosen should be prioritized based on criteria relevant for usefulness in a disaster [...].	<p>By March 2022, the City will provide an analysis addressing opportunities and constraints for utilizing private gas stations for emergency use. The scope of the analysis shall include, but not be limited to:</p> <ul style="list-style-type: none"> • Identification of emergency vehicles currently with and without access to private gas stations, including both City and private emergency fleet (for example, two private ambulance companies currently do utilize private gas stations.) • Analysis of private stations • Determination of whether private fueling locations should be added to the City's fuel plan
R9	<i>In the 2023 Capital Plan, the City should commit to building an additional fueling station with five-ten thousand gallon storage capacity for both gasoline and diesel fuels in the space to be freed up at the Southeast Treatment Plant when the digester replacement work is done, or to identify an alternate site for an additional fueling station if the Southeast plant is not available.</i>	<p>The City Administrator, ORCP, DEM and SFPUC will need to complete analysis of the City's fuel needs and identify potential fuel storage project scopes, costs, and target dates to understand if there are locations in San Francisco that are viable for such a storage project. This analysis should include looking at the fuel needs and potential fuel storage locations for City infrastructure located outside of San Francisco, such as the Hetch Hetchy Regional Water System.</p> <p>Regarding the potential use of the Southeast Treatment Plant (SEP) for fuel storage, the SFPUC is completing a SEP Campus Plan to determine how to best utilize the space at SEP. Any analysis of using SEP for fuel storage will need to be completed in the context of the SEP Campus Plan, and must include analysis around future SFPUC Wastewater and Recycled Water plans for SEP, the safety of storing large amounts of fuel in the same footprint as a wastewater treatment plant, and ensure consistency and compliance with the SFPUC's Racial Justice Resolution and Environmental Justice Policies regarding land use equity objectives. The analysis will be completed by January 31, 2023 for consideration in the FY 2024-33 Capital Plan.</p>

Recommendations Requiring Further Analysis (Cont.)

#	Recommendation	Response
R11	If the two contracted fuel suppliers are found to have joint vulnerabilities that cannot be mitigated adequately, the Office of Contract Administration should enter into a Memorandum of Understanding by December 2023 for emergency backup delivery with a vendor whose facilities and equipment are based outside of the Bay Area.	Within six months , the City will undertake an analysis to identify vulnerabilities of current fuel vendors (Western States Oil and Golden Gate Petroleum) and assessing potential alternative vendors outside of the Bay Area.
R17	<i>In the 2023 Capital Plan, the City should commit to funding capital projects that are identified in the Fuel Plan as a high priority to improve fuel resilience in the City over the subsequent ten years.</i>	Fuel resilience is critical to City operations. When developing the City's Capital Plan, the City should consider available alternative methods to building fuel resilience as well as other immediate/critical citywide capital needs. The analysis will be completed by January 31, 2023 for consideration in the FY 2024-33 Capital Plan.
R18	<i>In the 2023 Capital Plan, the City should specify how it will provide at least \$10 million in dedicated funding for fuel resilience capital projects within the next ten years using general obligation bond revenue.</i>	Fuel resilience is critical to City operations. When developing the City's Capital Plan, the City should consider available alternative methods to building fuel resilience as well as other immediate/critical citywide capital needs. The analysis will be completed by January 31, 2023 for consideration in the FY 2024-33 Capital Plan.

Recommendations Requiring Further Analysis (Cont.)

#	Recommendation	Response
R19	<p>By December 2024, the Office of Resilience and Capital Planning should publish a feasibility study on replacing current City backup generators with battery backup installations or other zero-emission technology by 2050. The study should examine costs, risks, and alternatives, including mobile and stationary battery sources, taking into account not only the present state of battery technology but likely future developments in upcoming decades.</p>	<p>This recommendation requires further analysis with key City stakeholders to determine a clear scope and identify funding. This analysis will be completed by December 31, 2022.</p>
R20	<p>By December 2024, the Office of Resilience and Capital Planning should publish a plan for achieving disaster resilience with a zero-emissions City vehicle fleet. This plan should analyze the stationary backup power sources that might be needed to recharge critical response vehicles in the event of a disaster and how bidirectional charging technology might be used to enable the batteries in City fleet vehicles to serve as mobile backup power sources analogous to mobile backup generators but also likely future developments.</p>	<p>This recommendation needs further analysis. Specifically, the analysis will inform the recommended plan. For instance, the analysis will identify bi-directional charging applications (case studies, technologies) and their barriers / how to overcome them. It will also identify the vehicle types / cohort of mixed vehicles ideal for vehicle-to-infrastructure (V2I), as well as location of those vehicles and general, preliminary estimates of any grid and City facility electrical upgrades necessary to support V2I. Additionally, it should address the various emergency infrastructure and automation required to enable V2I - as well as their costs. Finally, the analysis must include participation from the SFPUC because subject matter expertise in behind-the-meter electrical infrastructure and jurisdiction over City facility connections to the electric grid. This analysis will be completed by December 31, 2022.</p>

Recommendations That Will Not Be Implemented

	Recommendation	Response	
R12	<p>By December 2021, the Fuel Working Group should ask each City-contracted fuel supplier to send a qualified representative to the Group's planning meetings, field simulations, and other events where the technical advice and operational experience of fuel distributors are needed to help secure disaster readiness.</p>	<p>Will not be implemented - The City has continuously engaged with its fuel vendors in fuel resilience discussions, planning and exercises in numerous ways over the years. [...] We agree, however, that we should explore additional ways to engage our vendors in assisting the City proactively plan for events and strengthen fuel resiliency. This will be formally included in a future FWG agenda for consideration and recommendation to DEM.</p>	
R13	<p>By December 2023, as part of a Fleet Week live exercise, the Department of Emergency Management and the Office of Resilience and Capital Planning should test a scenario in which the City's normal supply line is damaged and delivery by water is necessary. This exercise should include a full demonstration of marine cargo delivery, readiness of the staging area, performance of the transfer-storage-filling equipment, and performance of the tanker trucks.</p>	<p>Will not be implemented - The San Francisco Fleet Week Exercise Program is developed jointly between San Francisco emergency managers, local first responder stakeholders, and state and federal military partners based on mutual need to test shared vulnerabilities. Fuel delivery and resilience was exercised in 2018 and 2019 and response to many other risks need to be examined, practiced and tested. Therefore, it is unlikely that fuel resilience will be tested again before December 2023.</p>	
R16	<p>By June 2022, the City Administrator's Office should publish a San Francisco Fuel Plan developed in collaboration with the Fuel Working Group. The Fuel Plan should cover key resilience measures such as:</p> <ul style="list-style-type: none"> • Processes and timescales for identifying fuel on hand in City-accessible storage • Citywide policies for maintaining fuel reserves in available tanks (e.g., keeping fleet vehicles topped up at the end of each day, reserve requirements for generator tanks) • Keeping track of burn rates in normal and plausible emergency scenarios • Information centralization for key sources and users of fuel, (e.g., types of hose connections used by fuel tanks) • Scheduling drills around emergency fuel deliveries including surrounding counties • Functional evaluation of city assets needed for emergency fuel delivery (e.g., piers, roadways, and equipment) • Reviewing city contracts with fuel vendors • Developing specifications for equipment that needs to be purchased <p>The Fuel Plan should also incorporate logistical lessons learned from the COVID pandemic.</p>	<p>Will not be implemented - The timeline presented in the recommendation is unrealistic. The San Francisco Emergency Fuel Plan and other corresponding documents that outline the key resilience measures will be published by December 2022.</p>	

Conclusion

Thank you for your time and consideration.

CCSF Agency Representatives Available for Questions:

- Adrienne Bechelli (DEM)
- John Scarpulla and Josh Gale (SFPUC)
- Jennifer Johnston (City Administrator/GSA)
- Don Jones (GSA – Central Shops/Fleet)
- Brian Strong (GSA – OCRP)
- Sailaja Kurella (GSA – OCA)
- Lowell Chu (ENV)
- Ashley Groffenberger (Mayor)