

INTEGRATION OF SOCIAL MEDIA INTO EMERGENCY PUBLIC INFORMATION

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ACRONYMS

This list includes the acronyms used in Appendices C (benchmarking), D (DOE sources), and E (other government agency sources). These appendices are available on the DOE Enterprise Data Management System (EDMS) website, <https://edms.energy.gov/Index.aspx>. Users must log into the EDMS system, establish an account if they don't already have one, click on the Sharepoint site, and enter into the search box "EPI-Social Media Study Reference Appendices" for viewing.

ANL

Argonne National Laboratory

CDC

Centers for Disease Control and Prevention

CEMP

Consolidated Emergency Management Plan

CEOC

Consolidated Emergency Operations Center

CERC

Crisis Emergency Risk Communications

CIO

Chief Information Officer

DHS

U.S. Department of Homeland Security

DoD

U.S. Department of Defense

DOE

U.S. Department of Energy

DOI

U.S. Department of the Interior

EDMS

Enterprise Data Management System

EMI/SIG

Emergency Management Issues/Special Interest Group

EMInS

Emergency Management Information System

EMT

Emergency Management Team

EOC

Emergency Operations Center

EPA

U.S. Environmental Protection Agency

EPI

Emergency Public Information

EPISC

Emergency Public Information Subcommittee

ERC

Emergency Risk Communication

ERO

Emergency Response Organization

ESF

Emergency Support Function

FDA

U.S. Food and Drug Administration

FEMA

Federal Emergency Management Agency

GridEx

Grid Security Exercise

GSA

U.S. General Services Administration

HIPAA

Health Insurance Portability and Accountability Act

IAEA

International Atomic Energy Agency

ICS

Incident Command System

ID

Idaho Operations Office

INL

Idaho National Laboratory

IT
Information Technology

JIC
Joint Information Center

JIS
Joint Information System

LANL
Los Alamos National Laboratory

LBNL
Lawrence Berkeley National Laboratory

NA-40
NNSA Office of Emergency Operations

NA-EA
NNSA Associate Administrator for External Affairs

NEA
National Education Association

NIMS
National Incident Management System

NNSA
National Nuclear Security Administration

NNSS
Nevada National Security Site

NRC
U.S. Nuclear Regulatory Commission

NUWAIX
Nuclear Weapons Accident/Incident Exercise

OSC
Operations Support Center

OUO
Official Use Only

PA
DOE Office of Public Affairs

PAST
Public Affairs Science and Technology

PIO
Public Information Officer

PUREX
Plutonium Uranium Extraction Plant

SNL
Sandia National Laboratories

SRS
Savannah River Site

WBT
Web-Based Training

Y-12
Y-12 National Security Complex

SUMMARY

An effective emergency public information (EPI) program can enhance the ability of the U.S. Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), to protect the health and safety of the public and workers while contributing to the Department's overall credibility during an incident. Social media and information-sharing networks have significantly impacted the source, means of transmission, and substance of information provided to the public, media, and onsite workers during an incident. Emergency information shared on social media is not always factual, and sometimes includes the sharing of rumors and misinformation. However, information shared by trusted agencies (such as DOE) has the potential to positively influence the actions of the public and onsite workers, as well as public opinion, specifically by sharing trusted, verified information.

Social media platforms and activities are distinct from more traditional channels such as news conferences and news releases, in that they now reach a wider public arena, including not only local and regional areas, but also national and international audiences. Although social media can trigger swift, organized, and massive public responses, it requires very little financial investment to implement, and can be accessed and updated almost instantaneously. Social media activity statistics tabulated from the Hanford Site Plutonium Uranium Extraction Plant (PUREX) tunnel collapse case study show that social media activities may surge by a factor of 100 or greater during an incident. Monitoring, responding to, and leading the social media activities require a clear strategy, concise policies, and sound procedures, along with a dedicated team of personnel trained in managing EPI and integrating social media activities.

The conclusions of this study are based on EPI/social media document reviews, EPI staff interviews, and observations of exercise conduct and performance. The analysis of the resulting information indicates that the DOE complex is not fully prepared to use social media effectively during an emergency. EPI/social media preparedness has been addressed to some degree by Headquarters staff offices (that is, the Office of Public Affairs,

the NNSA Associate Administrator for External Affairs, and the Office of Emergency Operations) and program offices (such as the NNSA, the Office of Environmental Management, and the Office of Science), and site organizations. However, key weaknesses exist:

- Headquarters staff and program offices with responsibilities for public and external affairs have not developed, promulgated, and implemented strategies in a plan that integrates social media into the EPI response during an emergency. The lack of a Headquarters-level strategic framework for designing an EPI/social media strategy for Headquarters and the sites contributes to incomplete EPI/social media preparedness, leads to risks of disseminating inconsistent or inaccurate information to the public and civil authorities during an emergency response, and creates a potential inability to address false information, misinformation, and rumors.
- Although all sites in the study have EPI/social media policies that address some of the needed elements, none have addressed all elements necessary for an effective EPI/social media response. Site visits and document reviews revealed that EPI/social media policies, plans, and procedures were inconsistently addressed or absent in site documents. A key element missing from all site-level EPI program plans is a site-specific EPI/social media strategy that includes provisions for collaboration and coordination of public information activities with offsite response agencies and stakeholders.
- The study revealed that sites have incorporated EPI/social media into their emergency plans and procedures to some degree. However, most sites are not prepared for the greatly increased volume of social media queries that are likely during an incident, and their EPI plans do not describe the training, drills, and realistic exercises necessary to address this issue. The review of site EPI programs identified a number of areas where improvements are needed to prepare sites to provide timely, candid, and accurate information to workers, the news media, and the public during an emergency.

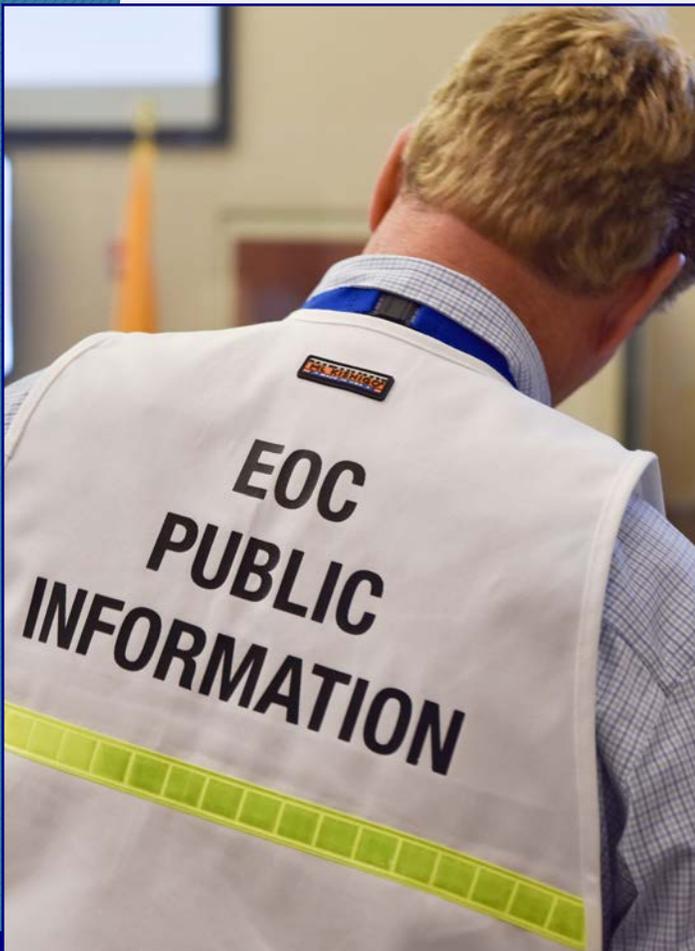
The study also identified nine best practices implemented by Headquarters, field elements, and site management and operations contractors:

- The Hanford Public Affairs team's response to the PUREX tunnel collapse used Facebook Live to broadcast real-time information from the emergency operations center (EOC). These live broadcasts proved to be an effective means of communicating with both the public and the media.
- The Hanford Public Affairs Team Leader had previously set his cellphone to alert when receiving specific key words from social media platforms, as demonstrated during the Hanford PUREX tunnel collapse response. These alerts facilitated a rapid public information/social media response by the Hanford Public Affairs team.
- The Hanford site contractor's information technology department quickly added web servers in response to increased social media activity during and after the PUREX tunnel collapse. This response action provided the necessary support to eliminate the overload on the website from increased social media traffic.
- The DOE Headquarters Office of Public Affairs has established an automated information-sharing system (and associated protocols) for coordination and concurrence of routine social media releases for daily operations.
- Site contractors at two sites used the Argonne National Laboratory (ANL) Public Affairs Science and Technology (PAST) Fusion Cell EPI and social media communications during site exercises to test the EPI/social media capabilities. The "mock media" from ANL PAST has been helpful in generating the exercise realism that is essential in improving the effectiveness and efficiency of EPI systems.



The Savannah River Site (SRS) DOE Headquarters Communicator developing the DOE Headquarters situation report and the SRS Offsite Interactions Coordinator providing an update to offsite stakeholders, along with the EOC Public Affairs staff preparing offsite communications and social media releases.

Photo Credit | Savannah River Site



The Los Alamos National Laboratory (LANL) EOC Public Information Coordinator (L) and the EOC Public Affairs staff (R) preparing for EPI and social media briefing update to the LANL EOC staff during the LANL annual site exercise, August 2019.

Photo Credit | Los Alamos National Laboratory

- The Y-12 National Security Complex (Y-12) site contractor uses the Emergency Management Information System (EMInS) to provide real-time information, data, graphics, and video capabilities necessary to efficiently manage an emergency and coordinate the response. EMInS offers a structured means of recording emergency information and sharing it among cadre members, and also provides connectivity among the Y-12 emergency response facilities and the outside Headquarters, state, and local response organizations.
- The Y-12 site contractor's Emergency Management and Public Affairs Office uses a social media simulator to simulate social media activities for EPI/social media training, drills, and site functional exercises.
- Both the DOE field office and site contractor of the Idaho National Laboratory and the Savannah River Site regularly participate with offsite organizations for EPI/social media coordination, collaboration, training, and drills.
- In addition to regulatory notifications for environmental releases, Savannah River Site and Los Alamos National Laboratory have established effective courtesy notification processes with offsite officials based on mutually agreed-upon trigger points. Courtesy notifications ensure that offsite agencies have prior access to information for events that fall outside reportable occurrences and/or may trigger media and public interest.

The study identified recommendations for Headquarters staff and program offices, field offices, and site contractors to better prepare EPI and integrate social media to help provide timely, accurate, and candid information to DOE employees, the public, offsite stakeholders, and the media. These recommendations include:

- Headquarters staff and program public affairs offices should develop overarching EPI/social media strategies, policies, and plans to provide guidance and direction to field offices and site contractors. The Headquarters Office of Public Affairs should develop a comprehensive Headquarters EPI program plan and associated procedures, as outlined in DOE Order 151.1D, *Comprehensive Emergency Management System*.
- Using the Headquarters strategies and policies, DOE field offices/contractors should develop site-specific EPI/social media strategies and policies, which in turn can be used to update and improve current site consolidated emergency management plans, EPI program plans, and procedures.
- These updated plans and procedures should be used to review and improve the sites' emergency response organization EPI staffing and training, drill, and exercise programs. DOE field offices and the site contractors should also address improvements in the sites' readiness assurance programs (encompassing EPI/social media corrective actions and validation/verification processes) and the sites' lessons-learned programs.
- DOE field offices and the site contractors should develop steps to improve the coordination, collaboration, and training support for EPI/social media activities with offsite agencies and organizations, media, and stakeholders to enhance the ability to respond in an emergency. For example, field offices and site contractors can coordinate EPI/social media activities with citizen advisory boards, news media organizations, local and state emergency management organizations, or local emergency preparedness committees.



A Hanford Facebook Live briefing from behind the scenes with Joint Information Center operations staff using Facebook Live during a news conference. The live feed is simulated by recording the news conference on the iPad.

Photo Credit | Hanford Site

1.0 INTRODUCTION

An effective emergency public information (EPI) program can enhance the ability of the U.S. Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), to protect the health and safety of the public and workers during an emergency response, as well as contributing to the overall credibility of DOE and NNSA. Social media and information-sharing networks have significantly affected the source, means of transmission, and substance of information provided to the public and onsite workers during a response. During an emergency, information promulgated on social media by outside sources, which may or may not be factual, has the potential to impact the actions of the public and onsite workers. For example, failure to respond promptly to requests for information from the public and media outlets early in the response can lead to the spreading of false information, misinformation, or rumors, and can lead to independent actions by onsite workers and the public that impact and impede the response.

After the Hanford Site Plutonium Uranium Extraction Plant (PUREX) tunnel collapse in May 2017, the *Hanford Site Emergency Public Information Case Study, PUREX Tunnel Collapse* (referred to as the Hanford PUREX tunnel collapse case study), identified a number of lessons learned, including:

- A sound social media strategy to support key messaging is important.

- Coordination of information flow with Headquarters, partnering agencies, and other key stakeholders is imperative.
- Ultimately, planning, preparation, training, and practicing are key elements for successful crisis communication.

The study reported here extends that effort to review the state of preparation across the DOE complex to respond to EPI needs using social media, including analysis of the planning, preparation, and use of social media in support of emergency response at Headquarters and selected sites. To review the full capability of DOE's use of social media in emergency response, the study team looked at site integration and coordination of public information with local, state, and tribal public information agencies, as well as with the DOE Office of Public Affairs (PA) and the NNSA Associate Administrator for External Affairs (NA-EA). The study also included benchmarking research on the use of social media for EPI at external organizations and other Federal agencies.

The study team reviewed planning at Headquarters staff offices (that is, PA, NA-EA, and the NNSA Office of Emergency Operations) and program offices (such as NNSA and the DOE Offices of Environmental Management and Science). The goal of reviewing planning was to determine, for example, whether EPI/social media strategies, policies, and plans ensure

An effective emergency public information program can enhance the ability of the DOE, including the NNSA, to protect the health and safety of the public and workers during an emergency response, as well as contributing to the overall credibility of DOE and NNSA.

that information being released at all levels is consistent and accurate, and whether they address provisions for coordinating information after the initial release, including through news releases and social media. The study team also explored whether DOE field elements and site contractors have well-developed, thorough EPI/social media strategies, policies, and plans to govern implementation of EPI/social media response at all levels of the site's public information organization. Finally, the study team examined the detailed implementation of the EPI/social media strategies, policies, and plans.

The results and conclusions of the study are discussed in Sections 2.0 and 3.0, respectively. Section 4.0 presents nine best practices, which are security- or safety-related practices, techniques, processes, or program attributes observed during the study that

may merit consideration by other DOE and contractor organizations. Section 5.0 presents recommendations for senior line management's consideration for improving program or management effectiveness. Appendix A outlines the scope and methodology used for the study, and Appendix B discusses available social media training, key responsibilities, and job qualifications. Background information regarding benchmarking (Appendix C), available DOE literature (Appendix D), and literature available from other government agencies (Appendix E) is provided at the DOE Enterprise Data Management System (EDMS) website, <https://edms.energy.gov/Index.aspx>. Users must log into the EDMS system, establish an account if they don't already have one, click on the Sharepoint site, and enter into the search box "EPI-Social Media Study Reference Appendices" for viewing.



Pantex Joint Information Center public affairs staff recording and taking notes during one of the NUWAIX Exercise 2019 EPI briefings for the news media.

Photo Credit | Pantex Plant

2.0 RESULTS

The results of the study are presented in the following three subsections: the status of strategies, policies, and plans at Headquarters staff and program offices; the status of strategies, policies, and plans at DOE field offices and site contractors; and site planning for and implementation of the use of social media by DOE field offices and site contractors.

2.1 Headquarters Staff and Program Office Strategies, Policies, and Plans

The objective of this portion of the study was to review the status of strategies, policies, and plans at the Headquarters staff and program offices to determine whether a framework for integrating EPI/social media into an emergency response was in place. The Director, PA, in coordination with the Associate Administrator for External Affairs, NA-EA, is responsible for developing and maintaining the Headquarters *Emergency Public Affairs Plan*, as well as necessary implementing procedures. DOE Headquarters staff and program offices typically have subordinate offices of external affairs or communications that are responsible for developing and participating in an integrated and comprehensive emergency management system that includes EPI/social media planning and implementation. Also, staff and program offices are to ensure that factual, consistent, timely, and accurate notifications to the public and media are made within their respective organizations and the DOE field offices under their purview. Despite the multitude of organizations with recognized responsibilities in this area, many aspects of strategy, policy, and planning for the use of social media during an emergency have not been addressed.

Headquarters staff and program offices have not developed, promulgated, or implemented strategies that integrate the use of social media into the EPI response during an emergency. The [Energy.gov](https://www.energy.gov) website includes an *Emergency Public Affairs Plan* associated with PA, which is intended to be approved jointly by PA and the NNSA Office of Emergency Management; however, this plan is outdated and in draft form. PA has also posted an undated social media policy that addresses the day-to-day routine administrative strategy and policy

requirements for the use of social media, and the administrative actions for receiving approval for social media platforms. The *Social Media – Department of Energy Policy* refers to the Headquarters *Emergency Public Affairs Plan* for use during an incident, but the policy does not address the transition to the plan and expansion and integration of EPI operations to address social media activities. No other documentation or plans were found for EPI/social media activities and operations internal to the DOE complex during an incident. Additionally, during interviews and/or email exchanges with Headquarters staff and program office public information staff, the staff members only identified general planning related to the National Response Framework for Emergency



The Hanford internal mobile notification app transmits emergency notification information and data to site leadership and employees, providing a quick link for information throughout the Hanford Site to provide emergency information and notification for protective action implementation and sitewide situational awareness.

Photo Credit | Hanford Site



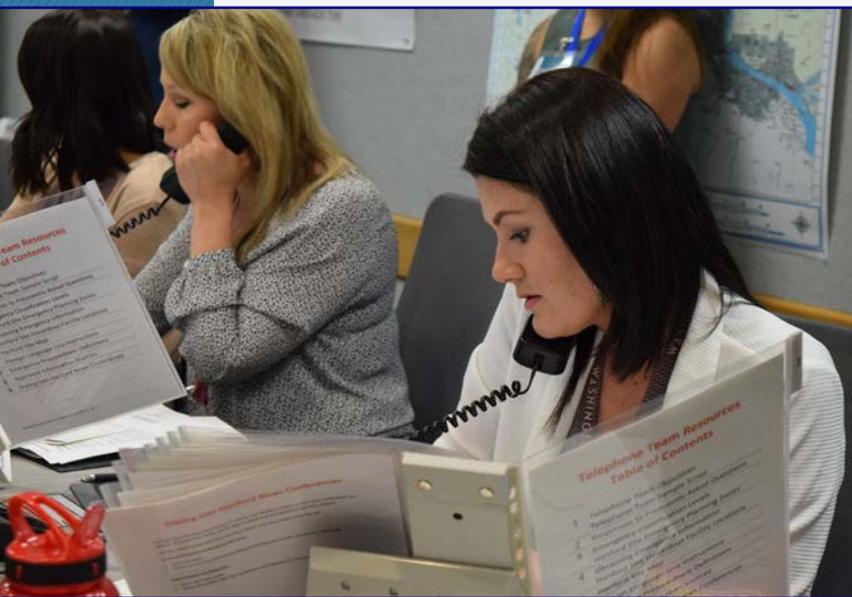
Hanford Site Online Media Monitoring Team members reviewing released information posted on the Hanford.gov website, and monitoring social media public inquiries/statements and news media inquiries on the Hanford Facebook page during a recent annual site exercise.

Photo Credit | Hanford Site

Support Function (ESF)-15 External Affairs, incident communications, and external affairs support activities at the national level.

The DOE Unified Coordination Structure All-Hazards Emergency Operations Plan governs the operational support of the Headquarters Emergency Management Team (EMT) in the Consolidated Emergency Operations Center (CEOC) for a national emergency, including support for ESF-15. It addresses some responsibilities for the use of social media and coordination of public information; provides general guidance on how EPI is disseminated to the public via social media; and describes policies and protocols. This plan does not address internal EPI operations or the integration of social media activities during an incident in the DOE complex.

The DOE EMT public affairs position is staffed by a single PA staff member, who supports the EMT when activated. The public affairs position is governed by a position description and checklist, but there is no associated implementing procedure. In addition, the position description and checklist do not address the expansive impact of social media on the variety of EPI operations that occur during an operational incident. An interview with the PA staff members supporting this function revealed that much of the social media work during emergencies focuses on posting DOE situation reports and amplifying safety and response messaging from Federal and industry partners. The staff also indicated that more formal planning for the use of social media, and EPI as a whole, during emergencies is needed at the Headquarters level. Additionally, the study team observed one of the PA EMT staff participating in a site-level exercise in support of CEOC activities. That staff member was not familiar with the automated information system in use during the exercise (the Y-12 National Security Complex [Y-12] Emergency Management Information System, or EMInS) and needed additional assistance to continue support during the exercise. The PA EMT staff member's participation in the site exercise, intended to involve notification, coordination, and collaboration in simulated EPI and social media activities, was not adequately planned and coordinated.



The Hanford Telephone Response Team handling telephone inquiries, providing responses to public and media telephone calls, and documenting the calls for follow-up actions.

Photo Credit | Hanford Site



A wide-angle photo of the Lawrence Livermore National Laboratory EOC during a recent site exercise update briefing to the EOC Manager, Emergency Director, and the ERO staff.

Photo Credit | Lawrence Livermore National Laboratory

Headquarters staff and program office public affairs staff have developed some documents regarding the use of social media to support EPI during an emergency, but none have developed a comprehensive EPI strategy, policy, and plans to guide the response within their line organizations. For example, NA-EA compiled a summary of emergency social media policy and guidance documents and best practices for use by individual sites but has not published an overarching strategy or policy. Likewise, the DOE Office of Science's Office of Communications and Public Affairs did not have a formal EPI/social media strategy, policy, or planning document and did not participate in crisis training or crisis communication planning.

Additionally, many DOE Headquarters policy directives and other documents singly address aspects of protection of information, such as information technology (IT) system security policies and restrictions, public records retention, internal Headquarters EPI/social media coordination, and privacy of personal information. These policies should be incorporated into the EPI planning process and the integration of social media. However, there is no single consolidated listing of all directives and other requirements that should be addressed during an incident in an EPI plan to ensure protection of emergency response information; protection of individuals' private information, such as Health Insurance Portability and Accountability Act (HIPAA) provisions; and restrictions on and consequences for employees' inappropriate use of social

media to release unauthorized or unvalidated emergency response information or photos.

In summary, the requirements for effective EPI operations (outlined in DOE Order 151.1D, *Comprehensive Emergency Management System*) and the integration of social media are not fully addressed and implemented at the Headquarters level. PA, NA-EA, and other staff and program office public affairs organizations have not prepared adequate EPI/social media strategies, policies, or plans (e.g., replacing the outdated Headquarters *Emergency Public Affairs Plan*) to guide their emergency response or provide direction for their respective sites in preparing their own plans. Additionally, Headquarters staff and program offices have not developed implementing procedures that support integration of social media use with DOE field and site contractor organizations, as required by DOE Order 151.1D.

Lessons learned from previous incidents, as well as benchmarking other national and international agencies, indicate that without a strategic framework at the Headquarters level, the risk of disseminating untimely, inconsistent, or inaccurate emergency response information is increased. Approved Headquarters strategies for communications and the use of social media are necessary to support development of consistent, effective strategies, plans, and procedures at the DOE field offices, sites, and activities, and the lack of an upper-level response framework contributes to incomplete

and inconsistent EPI/social media policies, plans, and procedures at the site and facility level.

(i.e., PA and/or NA-EA), the applicable staff and program offices, and the Headquarters ERO.

2.2 Site Strategies, Policies, and Plans

The objective of this portion of the study was to review the status of strategies, policies, and plans at DOE field offices and site contractors to determine whether they have a framework in place for integrating EPI/social media into the site's emergency response. The purpose of an integrated EPI/social media strategy is to identify key issues, pinpoint target audiences, and develop appropriate messages and communication activities in order to deliver the intended information to Headquarters, the public, media, and stakeholders before, during, and after an incident. Each site strategy will be different because many factors affect the target audiences, including DOE staff and program office missions, goals, and objectives, and the key site-specific issues (e.g., geography, area connectivity, and differences in social media platform use in rural and urban areas).

The study team's site visits and document reviews revealed that site planning documents are inconsistent in addressing, or do not address at all, any EPI/social media strategies and policies. All sites have EPI/social media plans that address some of the needed elements, but none have addressed all the elements necessary for an effective social media response, and EPI plans are often split among multiple documents. The study team found that a key element missing from all reviewed EPI plans was a comprehensive, site-level EPI/social media strategy. EPI/social media policy and plans did not consistently address provisions for collaboration and coordination of social media activities with offsite response agencies, stakeholders, the media, or state, local and tribal government emergency management organizations. For example, during two site exercises, site

DOE field element managers are responsible for ensuring that EPI/social media planning is integrated with the development and maintenance of the site's emergency management plan. The site contractor documents EPI planning, including the use of social media, in the site's emergency management plan and/or a separate EPI program plan. The strategy and policies established in the plan(s) serve as the basis for coordination between the DOE field element public affairs manager, the site emergency response organization (ERO), and local civil authorities, as well as for coordination with Headquarters



A representation of an international tabloid that used social media Twitter releases out of context to misinform the international community of a 2018 Pantex incident and emergency response actions taken.

Photo Credit | DOE/Office of Emergency Management Assessments



(L) SRS Emergency Manager and Public Affairs team briefing the DOE Site Management and Site Contractor Management Executive team before conducting a news conference during the 2018 SRS site exercise.

(R) SRS Public Affairs spokesperson provides an update to local news media outlets during the 2018 SRS site exercise.

Photo Credit | Savannah River Site

representatives tweeted protective action recommendations to the public, even though the authority and responsibility to transmit protective actions to the public rests with state and local emergency management organizations. Additionally, EPI/social media policies and plans did not consistently address provisions for coordinating public information activities with the Headquarters CEOC, PA and/or NA-EA, and/or the appropriate staff or program office public affairs staff.

All sites that were visited or that provided site EPI/social media planning documents in the study have either developed a separate EPI program plan or incorporated an EPI plan section into the site's consolidated emergency management plan (CEMP). However, not all site EPI program plans fully addressed strategies, policies, and plans. Additionally, not all site EPI program plans fully addressed procedures and/or position checklists; EPI/social media training, drills, and exercises; staffing and infrastructure; and readiness assurance. Furthermore, the sites that have separately published EPI plans do not ensure coordination

and adequate content between those plans and the CEMP, which could lead to possible confusion impacting the site's ability to provide timely, candid, and accurate EPI/social media information to the public, employees, media, and offsite stakeholders. Three sites had detailed EPI program plans in use (although two had not been updated to reflect the latest revision of DOE Order 151.1D), two sites were using unapproved draft plans, and a sixth site was in the process of drafting a new EPI program plan.

The EPI plans are also missing a sound, consistent EPI/social media approach for a number of site responsibilities, such as privacy of personally identifiable information; HIPAA restrictions; IT system security policies and restrictions; public records retention; or restricting employees' personal use of social media during a DOE incident. As an example, both the Hanford PUREX tunnel collapse case study and the Idaho National Laboratory (INL) Sheep Fire after-action report noted that employees took cellphone photos of the emergency scene locations

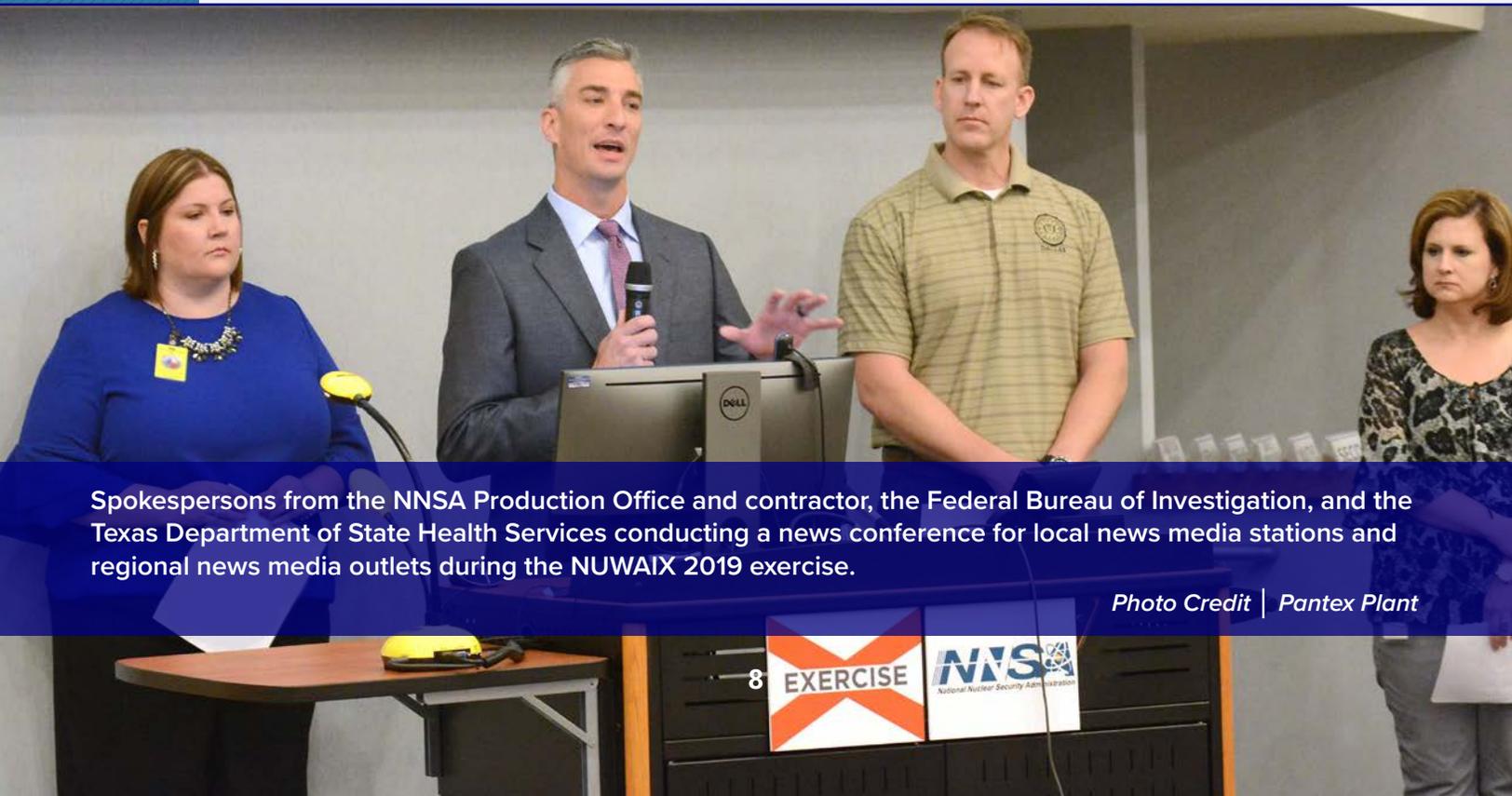
and sent text messages addressing onsite response activities and information without authority or review by appropriate managers or classification authorities. The uncoordinated and unvalidated release of information in both these emergencies contributed to a substantial increase in social media activities that impacted the flow of timely and accurate EPI to offsite agencies, as well as promulgating rumors and misinformation. Neither of the sites had policies restricting (or disciplining) site employees' unauthorized use of cellphones or transmission of information and photos off site during incidents.

Finally, the Hanford PUREX tunnel collapse case study, the INL Sheep Fire after-action report, interviews with site public affairs staff, and the reviewed site EPI/social media strategies, policies, and plans all indicate that the lack of Headquarters formal EPI/social media planning, strategy, and policy (as discussed above in Section 2.1) hampered the development of effective and consistent site-level EPI/social media strategy, policy, plans, and procedures.

Overall, site EPI/social media strategies, policies, and plans are not sufficiently complete or comprehensive to support development of site EPI program plans and integration of social media activities. Additionally, DOE field office and site contractor public affairs

organizations have not adequately coordinated and integrated EPI and social media activities with offsite stakeholders, counterparts, and traditional media in preparation for an incident. Finally, readiness assurance activities to assess the effectiveness of sites' EPI/social media response are not constructively incorporated into the sites' emergency management and EPI programs.

When site EPI/social media strategies, policies, and plans do not address an area of responsibility, the lack of direction leaves sites vulnerable to delays in the dissemination of critical health and safety information, and/or the dissemination of inconsistent or inaccurate information to the public, the workers, the media, and offsite organizations. In addition, without a consolidated set of policies addressing legal and administrative issues (Freedom of Information Act and HIPAA restrictions, personally identifiable information, IT system security policies and restrictions, public records retention, and employee use of social media during an incident), sites will be vulnerable to failures in protecting sensitive or protected information. The study team's observations from the sample of sites included in this study indicate that DOE sites have not fully developed necessary strategies, policies, and plans for effective use of social media during an incident.



Spokespersons from the NNSA Production Office and contractor, the Federal Bureau of Investigation, and the Texas Department of State Health Services conducting a news conference for local news media stations and regional news media outlets during the NUWAIX 2019 exercise.

Photo Credit | Pantex Plant

2.3 Site Planning for the Use of Social Media

The objective of this portion of the study was to review site EPI/social media programs to determine to what extent EPI/social media planning and implementation address procedures, training and drills, exercises, facilities and equipment, and readiness assurance. The team also looked at additional implementation elements of EPI/social media to determine whether planning builds on site strategies, policies, and plans to address rapid expansion of the sites' established public information channels through the selected social media platforms.

The DOE field element and site contractor public information offices are responsible for developing and maintaining the site's EPI plans and EPI functional elements. A successful site EPI/social media strategy and plan includes (in part) the following functional elements:

- Adequate implementing procedures
- Effective preparation through the training and drills program, including participation of offsite public affairs counterparts, local government agency public information officers (PIOs), and offsite stakeholders
- Challenging and realistic exercises to evaluate the EPI/social media response capabilities
- Sufficient resources, including personnel, facilities, and equipment
- An appropriately critical readiness assurance program.

■ EPI Procedures

All sites in the study had procedures or position checklists (or both) to support implementation of the site EPI/social media plan. Some of the procedures or checklists were detailed and provided the necessary steps to provide information to the public, employees, media, and offsite stakeholders in a timely, candid, and accurate manner. However, EPI procedures

did not consistently address the detailed actions necessary to conduct EPI/social media operations. Most of the procedures dealt with higher-level tasks; that is, checking off completed actions rather than addressing the specific actions needed to conduct EPI/social media operations. Also, some procedures did not match the published EPI plan. For example, although the social media coordinator and media monitor coordinator at one site are responsible for identifying and gathering rumors and misinformation and reporting them to the joint information center (JIC) manager or public information director, the governing procedure lacked information on how to define and identify a rumor or misinformation, analyze the data for trending purposes, and develop social media responses. At a second site, a single procedure was published for the entire EPI ERO staff, and at another site, only the EPI ERO managers had procedures, while the rest of the EPI ERO staff only had position checklists.

Ideally, procedures reflect the steps necessary to perform the functions of EPI positions within the framework of the plan, such as analyzing the gathered information and executing the response actions to achieve the final goal or objective – conveying timely, candid, and accurate information to the target audience. Position procedures and position checklists are both important and play complementary roles. Position procedures provide an organized process of expected actions to be performed, in a likely order, to complete the EPI actions for a specific position. Procedures form the basis for training and drills, exercises, and assessments, supporting validation of individual and collective ERO performance. In contrast, position checklists, which are intended to be consistent with the position procedures and match the published EPI program plan, serve as a historical record of completed actions during an incident.

As noted above, most of the procedures reviewed during this study reflected only higher-level tasks, rather than specific actions. When procedures omit detailed implementation steps, nearly every area of preparedness for EPI/social media response during an emergency is adversely affected. EPI/social media procedures must be specific enough for



News conference conducted by spokespersons from the NNSA Production Office and contractor, the Federal Bureau of Investigation, and the Texas Department of State Health Services for local news media stations and regional news media outlets during the NUWAIX 2019 exercise. *Photo Credit | Pantex Plant*

accountability, but nimble enough to respond to changing social platform dynamics. Procedures must focus more on the action (e.g., creating a list of approved responses, or ensuring that questions are responded to within 24 hours) and less on the specific aspects of the social media platform involved. Sites would benefit from developing specific EPI/ERO procedures that address key EPI/social media functions and operations to achieve EPI/social media goals and objectives.

■ Training and Drills

At all visited sites, all ERO members receive basic ERO training developed by the site emergency management ERO training staff, and some sites have position-specific training for EPI/ERO staff. However, the site public affairs staff was often not involved in developing training and drills targeted to specific EPI/social media positions. Instead, training often focuses on checklists, not on procedures – at least partly because the EPI/social media procedures are missing or less than adequate. For example, one site developed EPI training from position-specific checklists because EPI

procedures had not yet been developed from the draft EPI plan. One site had only basic ERO training, with no EPI/social media training, and a position walkthrough served as ERO qualification. Another site based the classes on the trainer's prior knowledge, skills, and abilities in EPI/social media instead of developing training based on the EPI program plan.

Sites have not focused sufficiently on EPI/social media training and drills, or have not conducted appropriately realistic and challenging EPI training activities with offsite counterparts and stakeholders. None of the sites visited during this study had a well-planned training and drill program for EPI/ERO members. Significant areas of weakness were ineffective classroom instruction (e.g., instruction based on the instructor's previous experience versus plan-based procedures, and ERO instructors not familiar with social media activities); lack of web-based training (WBT) for EPI/social media activities; inadequate training and qualification of newly assigned EPI/ERO members; less-than-challenging EPI-targeted drills involving significant social media activities; and lack of coordinated training with offsite



DOE Public Affairs Director providing news media update along with local ERO representatives during the NUWAIX 2019 exercise.

Photo Credit | Pantex Plant

stakeholders, media outlets, or offsite PIO counterparts. None of the visited sites use WBT classes for social media instruction as part of targeted training for EPI ERO members. There are several sources of WBT on EPI and the use of social media, and available EPI training is identified in Appendix B.

Interviews revealed that many of the EPI/social media activities (media and social media monitoring, telephone response, managing rumors and misinformation) are performed by volunteer personnel who are not well-versed in EPI operations. On average, 30% of the EPI ERO staff at each site were new, having just completed initial ERO training and some form of an individual drill (e.g., walkthrough or tabletop) for qualification before participating in the observed site exercise. In most cases, they had not participated in a functional drill to verify and validate performance prior to a site-level exercise. At all the sites, there was a limited verification, validation, and benchmarking process to evaluate performance during the qualification drill and to determine whether the staff member had demonstrated proficiency to perform in an exercise or in an actual incident.

In addition, training drills involving EPI/social media have not used challenging and realistic scenarios replicating the dynamics of social media that EPI ERO personnel will face. In some instances, internal ERO drills conducted during the year before the site exercise did not include the EPI ERO staff. However, at Nevada National Security Site and Los Alamos National Laboratory (LANL), the Argonne National Laboratory (ANL) Public Affairs Science and Technology (PAST) Fusion Cell Team was asked to provide training for the sites' senior spokespersons immediately before the site functional exercise, though the course did not specifically focus on social media.

Several sites did not effectively incorporate offsite stakeholders, media outlets, or offsite PIO counterparts in EPI training and drills. However, public affairs interactions involving media and offsite PIOs were scheduled and conducted during the year at some sites, such as the INL quarterly meetings with southeastern Idaho PIOs. Also, the Savannah River Site

(SRS) public affairs staff conducts a Media Day with local media outlets to promote and explain SRS operations. Field offices and site contractors can coordinate EPI/social media activities with citizen advisory boards, news media organizations, local and state emergency management organizations, or local emergency preparedness committees. These types of meetings provide opportunities to discuss incorporating media outlets and offsite counterparts to participate in EPI training, drills, and exercises.

In addition to the above, the Hanford PUREX tunnel collapse case study highlighted the contributions of prior training and drills, updates to the EPI plan and procedures, and development of pre-approved, pre-scripted messages in preparing the site to respond more effectively to a large volume of social media activity and provide timely and accurate information to the public, employees, and offsite stakeholders. Typically, to influence the first two to four hours of coverage, initial messaging to employees and offsite stakeholders needs to provide as much information as possible. For example, social media activity statistics tabulated during the Hanford PUREX tunnel collapse incident showed that social media activity surged by a factor of 100 or more. In the Hanford response, to get the emergency information webpage operational, the website administrator activated pre-scripted emergency page templates and used basic, pre-scripted information that was already in place. The Emergency Operations Center (EOC) Operations Manager stated that prior to the emergency, a drill had been scheduled to test EPI plans and checklists, so some of the pre-scripted information the staff planned to disseminate had already been developed. Additionally, the Hanford JIC staff established the emergency information webpage as the official information source and continued to focus social media traffic to the website from Hanford's Facebook and Twitter pages. These pre-planned and scripted messages were effective in the response.

Overall, however, EPI ERO performance in site-level exercises has been limited by the lack of focused, position-specific WBT and classroom

EPI training, and insufficiently challenging EPI and social media activities during EPI drills. EPI training and drills lack formality and consistency, in part due to incomplete site-level training plans. Sites would benefit from focused training that addresses key EPI functions, such as developing pre-scripted social media messages; developing social media responses, with consideration of social media message tone and platforms; identifying and analyzing rumors and misinformation; reporting rumors and misinformation; monitoring social media, listening, and reporting; and training with offsite PIO counterparts and stakeholders in preparation for an incident. The site EPI ERO staff's preparedness would also be enhanced through challenging drills and exercises, including drills and exercises that involve coordination, collaboration, and participation with offsite PIO counterparts and news media.

■ Exercises

Observation of exercises and review of after-action reports showed that site exercise programs typically do not focus sufficiently on EPI/social media activities to promote proficient social media operations during an incident. Site exercise committees normally include a member from the site contractor's public affairs office to help develop the EPI portion of the exercise, but at all the observed site-level exercises, the EPI and social media activity and the use of social media simulations did not mimic the volume of social media inquiries and activity that would occur during an actual incident.

At two of the observed site functional exercises, members of the ANL PAST Fusion Cell staff were asked to participate and presented some social media and media activities to the EPI staff, but the amount of social media activity and simulated media play did not challenge the EPI staff. At two other observed site exercises, simulated social media activities or media simulations were either very limited or not effectively planned and incorporated into the site exercises. For example, at one site, only telephone inquiries and television/radio broadcast simulations were implemented during the exercise, and no social media activities were incorporated into the exercise. At another site,



Pantex Plant Shift Superintendent conducting an operational update to the Pantex Emergency Manager, Emergency Director, and EOC staff.

Photo Credit | Pantex Plant

no media monitoring activities were planned or conducted for the exercise, and the social media simulations were not adequately planned or addressed prior to the execution of the exercise.

Although site exercise planners did not consistently plan to support the site annual exercises with social media activities (using, for example, ANL assets or social media simulators), the Emergency Management Issues/Special Interest Group (EMI/SIG) EPI Subcommittee (EPISC) investigated social media simulation for use in training, drills, and exercises in association with the ANL PAST Fusion Cell. That investigation evaluated a number of different social media simulation options using current technology and platforms. Both social media activities and mock media can be accomplished on site and/or remotely to support EPI and social media activity training drills and exercises (e.g., using ANL PAST Fusion Cell staff or using available technology for social media simulations). There is also an opportunity for sites to leverage their resources and develop mutually beneficial partnerships, under the auspices of the EPISC and in coordination with the Training & Drills Subcommittee and



Pantex Consequence Assessment Team Lead providing a protective action and consequence assessment update to the Pantex Emergency Manager, Emergency Director, and EOC staff.

Photo Credit | Pantex Plant

the new Emergency Management Exercise Subcommittee. Under such an arrangement, EPI personnel at one location could simulate social media activities for counterparts participating in a drill or exercise at another location, which would then reciprocate on a future drill/exercise. This opportunity has recently been listed in the EMI/SIG Emergent 50th Edition notice and posted on the EDMS website at: <https://edms.energy.gov/EM/help/Quick%20Guides/Access%20and%20Use%20the%20EMI%20SIG%20Social%20Media%20Simulation%20Application%20on%20Your%20Computer.pdf>.



Carson County Public Information Officer, along with the DOE Public Affairs Manager and contractor spokesperson, providing an update to local and regional news media during the NUWAIX 2019 exercise.

Photo Credit | Pantex Plant

Overall, the significant growth of EPI operations and the associated, expansive social media activity impact have not been effectively incorporated into and regularly tested in site exercises. Without sufficient planning, site exercises are not realistic and do not challenge EPI ERO staff or provide a meaningful measure of the staff's ability to respond to EPI/social media demands during an emergency.

**■ Resources
(Personnel, Facilities, and Equipment)**

The location, staffing, equipment, infrastructure, and layout of media centers and/or JICs have not been evaluated to ensure that they provide adequate operational support. The increased use of social media necessitates a re-evaluation of JIC attributes, such as location (fixed or mobile), staffing, equipment, and layout, to ensure an accessible location outside the emergency planning zone, along with an adequate number of computers, telephones/

cellphones, audiovisual equipment, monitors, copiers and scanners, and specialized supporting equipment – for example, a portable wireless hotspot and backup charging equipment for mobile devices. The EPI/social media plan is especially dependent on the numbers and types of equipment because the plan identifies the EPI/social media to be used and monitored, including websites, social media platforms, telephone inquiries, news releases, and news briefings. Staffing and equipment needs are also dependent on provisions for coordinating the information (internal and external) to be released, such as the use of an automated information sharing system and methods, and for classification reviews prior to release.

Review of the JIC location, staffing, equipment, and layout revealed that all the visited sites have a media center and/or JIC with the necessary support equipment, communications, and administrative support to conduct EPI/social media operations. Generally, sites have sufficient room for assigned ERO members, but limited space for offsite representatives and media to accommodate a “joint” operation. Also, in two cases, the JIC location was shared with other entities, possibly making the facility unavailable during an incident. Both sites had JIC locations either in or very near the emergency planning zone, and their alternate JIC locations were either far away (30 miles) or non-existent. The latter site had not analyzed its JIC location or established an alternate facility, despite a changed emergency planning hazards assessment and unfavorable prevailing meteorological data for a hazardous facility.

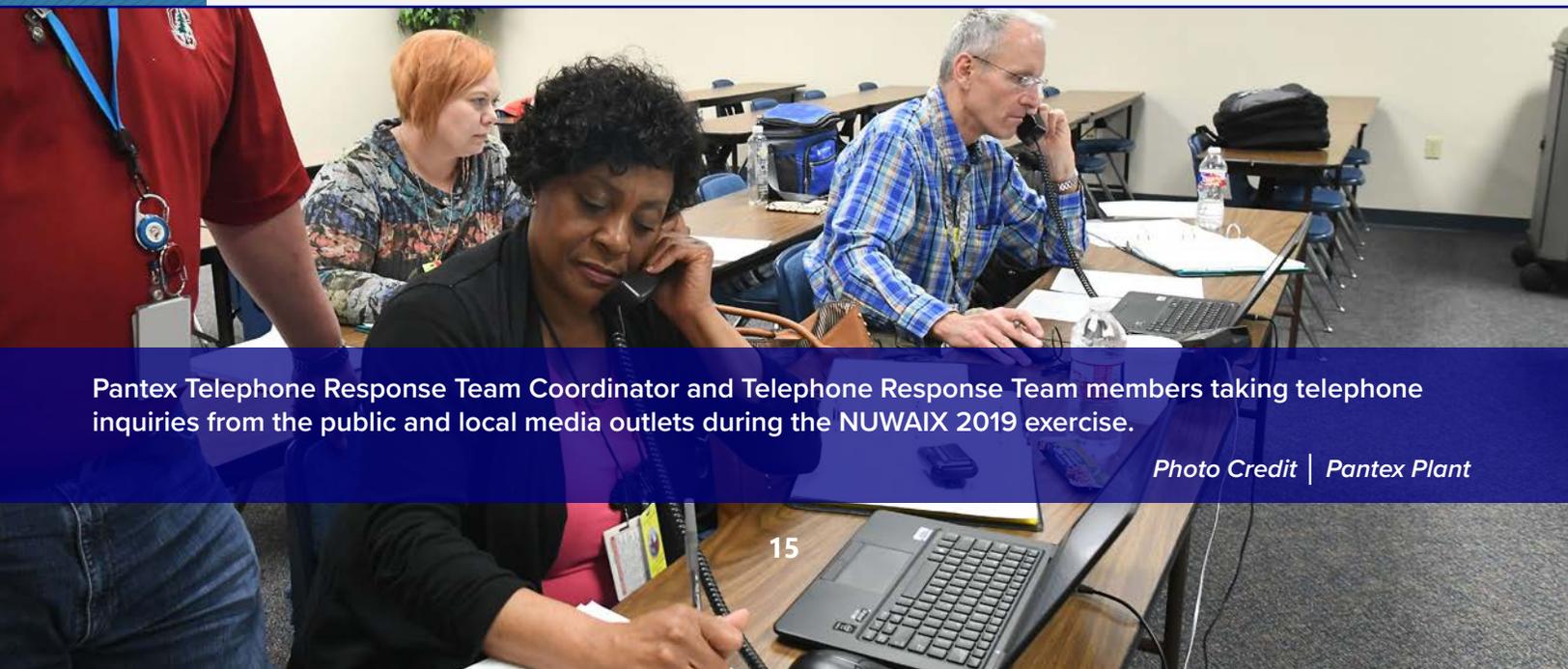
Further, JIC staffing was not often based on an analysis of the potentially extensive impact of social media interactions (such as their volume and importance) on EPI activities. For example, three of four visited sites had a single individual responsible for social media activity during a shift. The Hanford PUREX tunnel collapse case study identified the need for multiple, trained personnel in social media activities in order to adequately address the rapid expansion of social media activities during an emergency.

In summary, sites have not fully adjusted to the changes caused by social media and updated their equipment and JIC layout to meet the demands for instant, direct, and transparent communications. The previous methods of responding to the news media are being significantly impacted by the spread and evolution of EPI/social media communication channels and platforms, requiring more staff and equipment. Planning and preparation are needed to accommodate these increases.

■ Readiness Assurance

All sites visited during this study had a documented readiness assurance program and plan. However, EPI/social media readiness assurance assessments, corrective actions, lessons learned, and best practices are not consistently addressed at all sites.

The study revealed that EPI/social media is not always included in the site assessment schedule and that at some sites, personnel other than subject-matter experts from public



Pantex Telephone Response Team Coordinator and Telephone Response Team members taking telephone inquiries from the public and local media outlets during the NUWAIX 2019 exercise.

Photo Credit | Pantex Plant

affairs completed the readiness assessments. At one site, EPI/social media assessments were conducted by DOE field element Safeguards, Security & Emergency Services staff and site contractor emergency management staff, rather than by subject-matter experts in public affairs who are familiar with EPI/social media activities. At a second site, readiness assurance planning documents did not incorporate EPI/social media assessments into the schedule. At a third site, the public affairs staff who were interviewed had no knowledge of the EPI/social media assessment requirements.

Site exercise documents showed that corrective actions from previous site exercises had not been adequately verified and validated in site exercises. At three of four visited sites, the exercise was not constructed to verify or validate corrective actions for EPI/social media findings or opportunities for improvement identified during a previous site exercise. Also, at one site, an EPI/social media issue identified during the previous year's site exercise had not been addressed by an effective corrective action.

Further, important lessons learned and best practices from other sites were not always disseminated within the DOE field element or contractor public information office organizations. For example, at three of four visited sites, the Hanford PUREX tunnel collapse case study had not been disseminated within the site field element and contractor public information office organizations.

Overall, readiness assurance for EPI/social media is not effectively implemented in that EPI/social media readiness assurance assessments, corrective actions, lessons learned, and best practices are not consistently addressed. Also, personnel other than subject-matter experts from public affairs completed the readiness assessments. Finally, corrective actions from previous site exercises had not been adequately verified and validated in site exercises.

In summary, the study identified several areas in which sites' planning and preparedness activities may not sufficiently address site preparations for use of social media. EPI

procedures are not always in place to support training, drills, and response, and do not consistently address the detailed actions necessary to conduct EPI/social media operations. In addition, sites do not focus adequately on EPI/social media training and drills or conduct appropriately challenging EPI training activities with offsite counterparts and stakeholders, allowing shortcomings in procedures to persist. Further, site exercise programs typically do not focus sufficiently on assessing the adequacy of EPI/social media activities. The location, staffing, equipment, infrastructure, and layout of media centers and/or JICs have not been evaluated to ensure that they provide adequate operational support. Finally, EPI/social media readiness assurance assessments, corrective actions, lessons learned, and best practices are not consistently addressed at all the sites.

3.0 OVERALL CONCLUSION

This study indicates that the DOE complex is not fully prepared to use EPI/social media effectively during an emergency. Interviews with DOE Headquarters, field office, and contractor public affairs and EPI ERO staff, reviews of site-level EPI program plans, and examination of the planning and conduct of EPI/social media training, drills, and exercises all suggest that social media is not sufficiently integrated into the EPI response framework. The current weaknesses in EPI/social media performance stem from an absence of formal Headquarters strategy, policy, and guidance; incomplete and inconsistent strategies and policies at the site level; and weaknesses in site-level plans, procedures, and preparations.

4.0 BEST PRACTICES

Based on observations, interviews, and reviews of planning documents and previous after-action reports or assessments (such as EMI/S, Facebook Live, or EMI/SIG EPISC presentations), the study team identified nine best practices – security- or safety-related practices, techniques, processes, or program attributes observed during the study that may merit consideration by other DOE and contractor organizations. Line managers are encouraged to contact the identified sites directly for further information.

■ Use of Live Stream Broadcast

A notable aspect of Hanford’s Public Affairs response to the PUREX tunnel collapse was the use of Facebook Live to broadcast real-time



information from the EOC. During this incident, the volume of

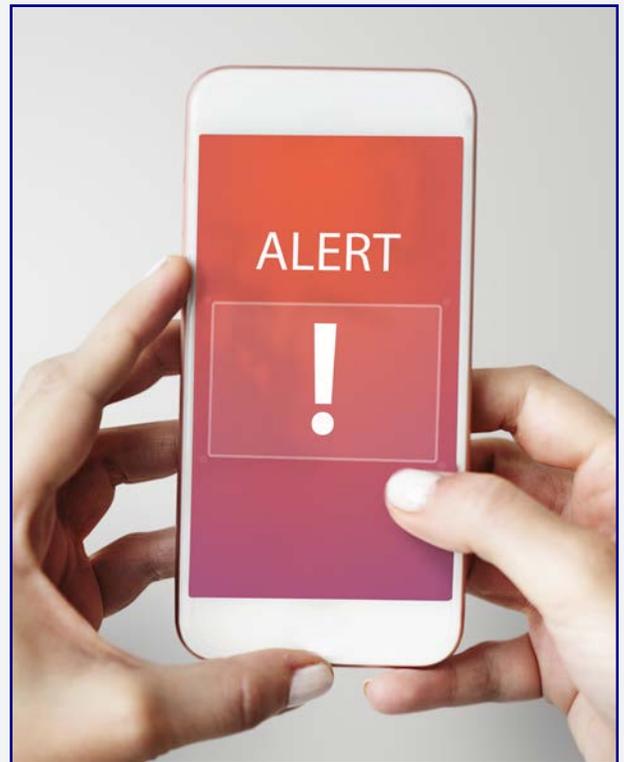
media requests taxed the Public Affairs staff, and because of operational issues with the audiovisual equipment, Public Affairs could not hold traditional news conferences. The Hanford Public Information Director, who felt that the Hanford team needed to quickly address the situation in a format that the media and public could access, made the decision to conduct a live broadcast using Facebook Live. Once this decision was made, the JIC Manager and News Manager developed the content for dissemination and used a map to show the location of the PUREX tunnel. Most importantly, the Hanford JIC team communicated to the public that there was no evidence of contamination or release and directed people to the Hanford website, which contained the latest information.

Conducting a virtual live broadcast using a social media platform, such as Facebook Live, may provide the flow of information necessary to contain expansive social media inquiries and mitigate rumors, misinformation, and disinformation. These types of social media platforms may enhance, and in some cases replace, the traditional news conference by providing real-time updates and personal interaction during an incident. However, cyber security organizations will need to address

security concerns and develop protocols to support the use of such social media platforms.

■ Enhancing Social Media Alerts

As demonstrated during the Hanford PUREX response, social media platforms can be set to alert a designated phone number or email of mentions based on specific keywords, facilitating rapid public information/social media response by the public affairs team. The Tri-Cities area around Hanford has an active news media, and many Hanford employees routinely reach out to the news media when an event occurs. In the case of the PUREX tunnel collapse, as soon as the alarms sounded, at least one employee began sending a local reporter the message notifications and employee communications that were being disseminated to site employees. The reporter posted about the emergency on Twitter just



three minutes after the initial notifications were transmitted, and other news media outlets, seeing the report on Twitter, began covering the event. This coverage led to a barrage of media attention immediately following the incident. Because the Hanford Public Affairs Team Lead had arranged for alerts to be sent to his cellphone when the site was mentioned on

various social media platforms, he was able to respond quickly to the event coverage.

■ **Providing Additional Website Server Capacity**

During and after the Hanford PUREX tunnel collapse, the site IT department noted increased demands on the Hanford website, stemming from social media activity, and added more web servers to accommodate the increased website traffic. The Hanford EOC Operations Manager provided statistics showing that more than two million people accessed the Hanford website during the first two days of the event, and Hanford's Facebook posts reached more than 700,000 people.

■ **Coordination through an Automated Information-sharing System**

PA has established an automated information-sharing system (and associated protocols) for coordination and concurrence of routine social media releases for daily operations, using the Sprout Social platform to coordinate social media postings across program offices and national laboratories for routine public information releases. This media platform may also be used as a mechanism for approval of social media postings for concurrence and/or review by PA during an incident. Of note, the Sprout Social platform

is a paid service, and DOE site organizations would need to ensure that they have purchased the platform and received training on how it operates. Currently, most sites use the WebEOC system platform for a wide range of purposes, including this, since it is an approved DOE Headquarters platform for coordination and approval of information between emergency response facilities and notifications to the Headquarters CEOC.

■ **Utilizing the Argonne National Laboratory PAST Fusion Cell**

Two sites have used the ANL PAST Fusion Cell resources to test EPI/social media communications capabilities; funding for ANL's participation comes from NNSA. During recent exercises, the Nevada National Security Site and LANL used a risk and crisis communication team from ANL to help identify improvements in EPI systems. This outside cadre of experienced public affairs professionals, referred to as the "mock media," simulated news media and social media coverage. Working both on site and virtually, the mock media produced newscasts, developed news stories, and put forth questions and rumors through social media injects, thereby giving the exercise participants a realistic decision-making environment. The mock media also made reporter phone calls, conducted live on-camera interviews, and participated in news conferences and briefings.



Argonne National Laboratory

Photo Credit | Argonne/PAST Fusion Cell

Throughout the planning process, a mock media team worked closely with the exercise director to ensure that all activities were properly coordinated. The use of professional, external resources is especially helpful in generating the exercise realism that is essential in improving effectiveness and efficiency of the senior emergency management officials and within the JIC.

■ Utilizing an Internal Automated Information-sharing System

Y-12 uses EMInS to provide the real-time information, data, graphics, and video capabilities necessary to efficiently manage an emergency and coordinate the response. EMInS offers a structured means of recording emergency information and sharing it among cadre members. Individuals access EMInS through a web interface that provides electronic access to decision-making reference materials and real-time event status information in the form of text, video, and static images. EMInS provides connectivity among the EOC, the JIC, and the Technical Support Center at Y-12, as well as to the Headquarters CEOC, NNSA Headquarters, the State of Tennessee EOC, the City of Oak Ridge, and the surrounding county EOCs.

■ Using a Media Simulator

The Y-12 site contractor's Emergency Management Department and Office of Public Affairs uses a social media simulator to simulate social media activities for EPI/social media training, drills, and site functional exercises. The internal IT department staff developed the simulator, which supports the EPI training and exercise program and provides social media activity by replicating public and social media inquiries addressed to the Y-12 website and associated social media addresses. Y-12 uses the simulator to train EPI ERO staff to identify

and report rumors, misinformation, and trending activities as posted on Y-12 social media platforms. Additionally, the ANL PAST Fusion Cell has the capability to remotely provide social media simulations using social media platforms. The EMI/SIG EPISC and ANL PAST Fusion Cell personnel have identified and recommended the use of a social media simulation tool that is on the EMI/SIG EDMS website and may be downloaded to use for social media activity training, drills, and exercises. With a social media simulation option and platform, both social media activities and mock media can be accomplished on site and/or remotely to support EPI and social media activity training drills and exercises (e.g., using ANL PAST Fusion Cell staff or using available technology for social media simulations). There is also an opportunity



A LANL EOC Public Information Officer and the EOC Public Information News Writers preparing a news release and entering information into the EOC database during the LANL annual site exercise, August 2019.

Photo Credit | Los Alamos National Laboratory

for sites to leverage their resources and develop mutually beneficial partnerships, under the auspices of the EPISC and in coordination with the Training & Drills Subcommittee and the new Emergency Management Exercise Subcommittee. Under such an arrangement, EPI personnel at one location could simulate social media activities for counterparts participating in a drill or exercise at another location, which would then reciprocate on a future drill or exercise. This opportunity has recently been listed in the EMI/SIG Emergent 50th Edition notice and posted on the EDMS website at: <https://edms.energy.gov>.



ANL PAST Fusion Cell Exercise News Network conducting a mock media news broadcast in support of a recent Hanford Site exercise.

Photo Credit | Argonne/PAST Fusion Cell

■ **Participating Regularly with Offsite Organizations**

Two sites regularly participate with offsite organizations for EPI/social media coordination, collaboration, training, and drills. At INL, the Southeast Idaho Regional PIO group was formed so that if an incident in southeast Idaho impacts more than one of the member agencies, the PIOs already know each other, have contact information, and can work together to share official, approved information with the public. This is a private group created for Southeast Idaho Regional PIOs who are spokespersons for their agencies and organizations; the group assists not only during emergencies, but also whenever collaboration is needed for the benefit of the organizations and communities. The group meets quarterly to discuss topics of interest and introduce new PIOs.

SRS regularly communicates with local and regional media outlets to provide opportunities

to stay informed of the site's missions and ongoing activities. Media outlets are routinely invited to major milestone events for both onsite and offsite activities. On a regular basis, the SRS public information offices interact with members of the media to ensure that they understand the scope of work performed at the site and how it pertains to emergency management and the release of information to the public. Additionally, in previous site functional exercises, the emergency management department and the public affairs offices invited and coordinated with local media reporters and journalism students to participate in a site exercise involving emergency operations and the release of EPI/social media to the public. These reporters and students "role played" members of the media participating in news conferences associated with a simulated incident, thereby gaining an understanding of what to expect during an actual emergency at SRS, and what information they can expect to be available and through



ANL PAST Fusion Center Training Academy conducting a social media strategy training session at the Lawrence Berkeley National Laboratory.

Photo Credit | Argonne/PAST Fusion Cell



ANL PAST Fusion Cell Exercise news network mock media reporter conducting an ad hoc news interview with the LANL Public Affairs Spokesperson outside of the LANL Media Center and simulating streaming of the interview on a social media platform in support of the GridEx 2019 exercise.

Photo Credit | Argonne/PAST Fusion Cell

what means. Before the simulated event, media members and students are briefed on the upcoming exercise and given information on how they can participate. The overall goal is for the media and the students to develop an appreciation of the emergency management program and EPI/social media at the site, and a better understanding of how to interact with SRS in the event of an emergency.

■ Courtesy Notification Processes

In addition to regulatory notifications for environmental releases, SRS and LANL have implemented effective courtesy notification processes with offsite officials based on mutually agreed-upon triggers. Courtesy notifications ensure that offsite agencies have prior access to information for events that fall outside reportable occurrences and/or may trigger media and public interest. Courtesy notifications are provided to state agencies with which the sites have a relationship, such as emergency management directors within bordering counties, an adjacent commercial nuclear power plant (SRS), DOE Headquarters, and onsite management personnel. Although not required, initial courtesy notifications are typically completed within one hour of discovery by the site operations center. The SRS and LANL courtesy notification procedures outline criteria for determining whether an event, condition, or concern requires such a notification. If a situation does not seem to meet any of the agreed-upon triggers and the emergency duty officer is uncertain whether to perform notifications, a conference call with pre-determined management officials is convened to make that decision.

The courtesy notification process helps the site public affairs office anticipate an increase in media attention and inform certain stakeholders so that preparations can be made. This EPI activity provides timely, candid, and accurate public information to employees, the public, and the media before social media activity begins. This approach decreases the number of social media inquiries to the public affairs office, allowing the office to better manage public and media attention.

5.0 RECOMMENDATIONS

These recommendations are based on the analysis summarized above in Section 2. Recommendations are suggestions for senior line management's consideration for improving program or management effectiveness. They transcend the specifics associated with findings, deficiencies, or opportunities for improvement and are derived from the aggregate consideration of the results of this study.

5.1 Headquarters Staff and Program Office Strategies, Policies, and Plans

Headquarters should develop a set of comprehensive Headquarters strategies, policies, plans, and implementing procedures that address key social media and EPI elements.

Discussion: The DOE complex would benefit from a set of comprehensive Headquarters strategies, policies, plans, and implementing procedures that address key social media and EPI elements, such as the roles and responsibilities of the various Headquarters public affairs offices during an emergency; internal Headquarters EPI/social media coordination; and roles, responsibilities, and coordination between site and Headquarters response organizations. Other relevant topics include agency-wide training and qualifications, privacy of personal information, privacy of HIPAA information, IT system security policies and restrictions, public records retention, and restrictions on and consequences for employees' unauthorized use of social media during an incident. With Headquarters EPI/social media plans and procedures in place to establish clear objectives, identify required activities, identify quality standards, emphasize desired outcomes, identify necessary resources, and establish a clear process for monitoring progress, field elements and contractors can develop an integrated set of EPI/social media plans and procedures. These in turn can provide clear guidance and consistent EPI/social media response actions necessary to provide effective public information during an incident.

■ Headquarters Office of Public Affairs (in conjunction with the NNSA Office of External Affairs)

In conjunction with NA-EA, PA should:

- Develop an overarching EPI/social media framework to guide Headquarters staff and program office public affairs organizations, field offices, and site contractor organizations in defining courses or methods of action for the use of social media in EPI operations during incident response and recovery.
- Develop EPI/social media strategies, policies, and plans (e.g., Headquarters EPI program plan per DOE Order 151.1D) necessary to implement EPI and integrate social media activities.
- Establish a set of implementing procedures to execute the strategies, policies, and Headquarters plans.
- Evaluate the internal staffing levels needed to support DOE EMT operations during an incident and consider establishing a national cooperative network of trained DOE public affairs officers to provide surge support to other sites to supplement social media monitoring, paying close attention to the expected expansion of social media activities across the entire public information spectrum.
- Evaluate the efficacy of standardizing the use of information tools, such as Facebook Live, for complex-wide use during an incident.
- Assess the benefit of designating and standardizing an automated information-sharing system to use within the DOE complex to link Headquarters, NNSA, and site EPI staff during an incident and to facilitate review and approval of EPI and social media information and responses.



The SRS Site Public Affairs team, the Site Security Representative, and administrative support staff in the EOC reviewing emergency public information and news releases during the SRS 2018 site annual exercise.

Photo Credit | Savannah River Site

■ Program Offices

Program offices should:

- Develop internal EPI/social media strategy and policy based on mission, objectives, and goals.
- Develop EPI/social media plans and procedures that provide additional direction, as needed, to ensure the development of consistent EPI/social media strategy, policies, and EPI/social media plans and procedures at individual sites/facilities.
- Evaluate the internal staffing levels needed to support operations during an incident, paying close attention to the expected expansion of social media activities across the public information spectrum.

5.2 Site Strategies, Policies, and Plans

Sites should develop EPI/social media strategies, policies, and plans necessary to provide clear guidance, direction, and standards for developing consistent EPI/social media response actions and the communication channels necessary to respond effectively to an incident.

Discussion: Site EPI/social media strategies, policies, and plans are necessary to provide clear guidance, direction, and standards for developing consistent response actions and the communication channels necessary to respond effectively to an incident. These strategies, policies, and plans should establish clear objectives; identify required activities to be accomplished; identify quality standards; emphasize desired outcomes; identify necessary resources; and establish a process for monitoring progress, identifying areas for improvement, and following up to ensure that those areas have been addressed. The strategies, policies, and plans must also account for the interfaces and requirements of the Headquarters and program offices plans and procedures.

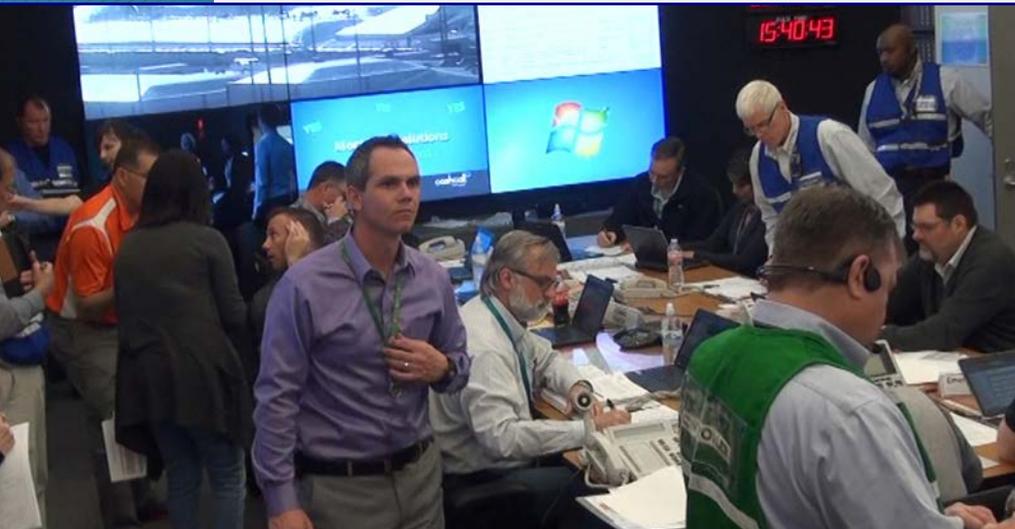
■ DOE Field Elements and Site Contractors

DOE field offices and site contractors should:

- Incorporate guidance from the Headquarters staff and program office strategies, plans, and procedures into the site's EPI planning documents.
- Review current EPI program plans and ensure that they adequately address EPI strategy, policy, procedures, and position checklists;

EPI training and drills; exercise planning, staffing, and infrastructure; integration of training and drills with offsite stakeholders; and a readiness assurance process.

- Address coordination, collaboration, and training support for EPI activities with offsite agencies and organizations, media, and stakeholders in the EPI plan, such as citizen advisory boards, news media organizations, local and state emergency management organizations, or local emergency preparedness committees.



The Pantex EOC Executive Team Room during an update briefing to the Pantex Executive Team using the briefing wall as part of the Pantex site annual Chaos-17 exercise.

Photo Credit | Pantex Plant

5.3 Site Planning for the Use of Social Media

Sites should develop or enhance a comprehensive EPI program plan and implementing procedures that include training, drills, and exercises; identification of sufficient resources; and an effective readiness assurance program.

Discussion: The DOE field element (public information office) and site contractor (emergency

management office and public information office) are responsible for developing and maintaining the site's EPI plans and response elements. The functional elements needed to successfully implement a site's EPI/social media strategy and plan include (in part) implementing procedures, a training and drills program, challenging exercises to evaluate EPI/social media response capabilities, sufficient resources, and an effective readiness assurance program.

■ DOE Field Element Public Information Offices

DOE field element public information offices should take the following actions in coordination with the site contractor emergency management office and public information office.

To ensure that procedures adequately address the steps necessary for an effective EPI/social media response, DOE field element public information offices should:

- Conduct a benchmark review of plans at other sites, such as the comprehensive program described in the Y-12 EPI program plan.
- Evaluate internal communication needs for providing and coordinating information, maintaining situational awareness with all emergency response facilities, and ensuring timely and accurate EPI (to the public, employees, media, and offsite stakeholders), and then develop a strategy to establish effective communication links, such as an automated information-sharing system.
- Develop site-specific EPI strategies and policies and define courses or methods of action for EPI operations and the use of social media during incident response and recovery (based on mission, objectives, and goals).
- Develop a site-specific EPI program plan, implementing procedures, and response checklists for the associated ERO positions based on the site EPI strategy and policy.

- Review current EPI/social media procedures to ensure that they address how to

accomplish EPI/social media operations and focus on analysis, planning, and execution of EPI and integrating social media activities into incident response.

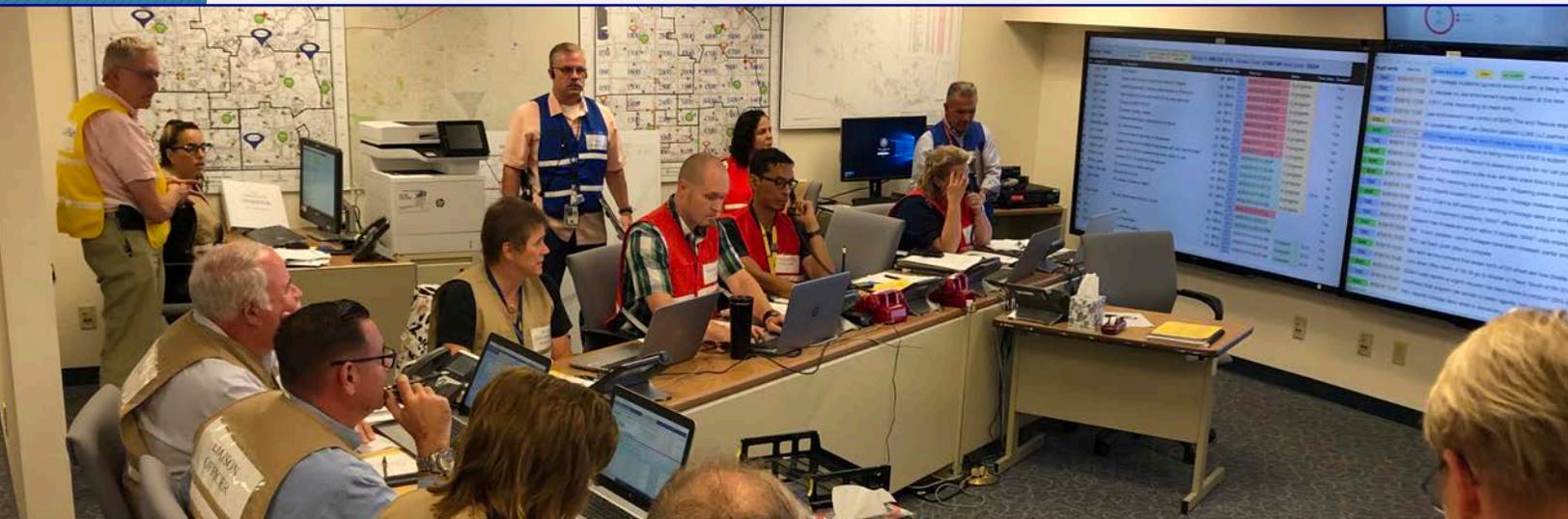
- Develop and approve pre-scripted EPI/social media messages and graphics prepared for immediate release to post on the site website or transmit on social media platforms to the public and media.

To enhance the training provided to EPI/social media responders, DOE field element public information offices should incorporate into the EPI training plan:

- Comprehensive training and drills for new EPI ERO members.
- Position-specific classroom instruction based on EPI procedures or subject-matter expert input (until adequate procedures are developed and validated).
- Regularly scheduled training and drills targeted to the EPI ERO.
- WBT classes specifically addressing position-specific EPI/social media activities and operations.

- Challenging EPI ERO functional drills involving EPI and social media activities.
- A formal process for evaluation, verification, and validation of EPI ERO members' performance and qualification.
- EPI/social media training and drills with offsite stakeholders, media outlets, and offsite PIO counterparts, such as citizen advisory boards, news media organizations, local and state emergency management organizations, or local emergency preparedness committees.
- Use of social media simulations (such as those available from the ANL PAST Fusion Cell or organizations with similar capabilities) in training, drills, and exercises to prepare EPI ERO staff for the increased use and impact of social media activity during an incident.

To strengthen the exercise program, DOE field element public information offices should ensure that site exercise planning includes EPI operations and the integration of social media activities, along with the necessary resources, to allow site functional exercises to lead to proficient social media operations during an incident. EPI exercise planning should include:



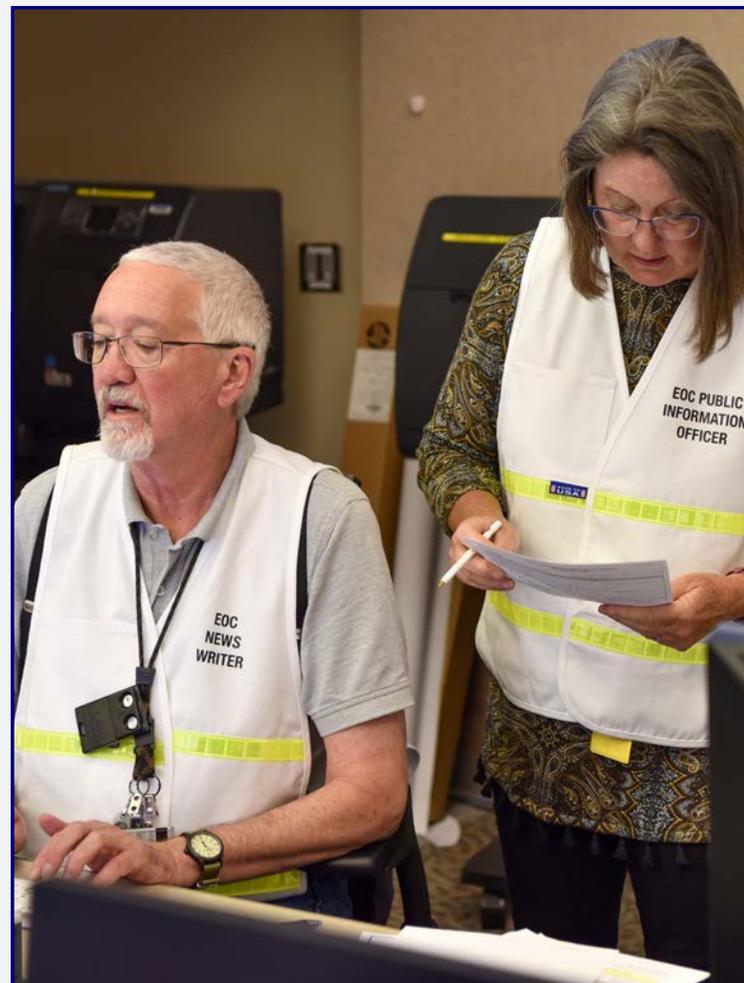
The Lawrence Livermore National Laboratory Public Information Manager and News Writer briefing the Laboratory Emergency Director, the Emergency Director, and EOC operations staff on new public EPI listed on the EOC Significant Events Board during a recent site annual exercise.

Photo Credit | Lawrence Livermore National Laboratory

- Assigning a senior member from the site contractor public affairs office, proficient in EPI operations and social media activities, to serve as a member of the site exercise committee and to plan, develop, and coordinate the EPI/social media portion of the exercise, including PA participation.
- Developing the number of EPI/social media activities necessary to challenge the EPI ERO staff during exercises.
- Incorporating sufficient EPI and social media activity in site exercises to adequately address the significant growth of EPI operations and implementation of expansive social media activities, and to challenge the EPI staff.
- Using social media simulations to replicate social media activities during an incident, and validating that adequate resources are available to implement the EPI/social media plans and procedures.
- Assess the use of a media broadcast platform, such as Facebook Live or Periscope for Twitter, as an information dissemination tool that can provide a real-time, virtual interactive broadcast that replaces or enhances the standard informational news conference.
- Evaluate the number of web servers that will need to be added to site website platforms to prepare for the increased social media activity demands on these platforms during and after an operational incident, and include provisions for additional web servers in the site's plans and procedures.

To verify that adequate space and equipment are available to support an effective response, DOE field element public information offices should:

- Review the site EPI program plan to ensure that it adequately analyzes and plans for expansion from daily public information operations to increased EPI/social media activities during an incident, in order to preclude overwhelming the logistics and public information staff.
- Conduct a review and analysis of the current site media center and/or JIC location (primary and alternate, as applicable), equipment, and layouts to determine what is needed to accommodate and support joint information system (JIS) operations.
- Conduct a review and analysis of the current site media center and/or JIC EPI ERO staffing to determine what is needed to effectively and efficiently support the potential expansive increase in EPI operations and integration of social media activities, including effective linkage with potential offsite resource support.



The LANL Public Information Officer and News Writer in the EOC preparing emergency public information for a news release and social media platforms during the LANL annual site exercise, August 2019.

Photo Credit | Los Alamos National Laboratory

- Evaluate whether the site would benefit from a cellphone notification protocol so that public affairs officials receive automatic alerts when site-specific information is posted to selected social media platforms.

To improve the effectiveness of readiness assurance activities for EPI/social media functions, DOE field element public information offices should:

- Participate in a complex-wide EPI/social media lessons-learned program to share information with all DOE field element and site contractor public information offices, using (for example) OPEXShare and the DOE Corporate Lessons Learned Database.
- Review the implementation of the readiness assurance process to ensure that EPI/social media activities are effective. Consider whether:
 - Assessments are tasked and conducted by appropriately qualified personnel who are subject-matter experts in EPI/social media.
 - Assessments are planned, scheduled, and completed in a timely manner.
 - The corrective action process for verification and validation of EPI/social media findings and deficiencies (identified during site exercises or assessments) is effective.
 - Lessons learned are routinely reviewed by responsible individuals and actions taken to revise the site's plans and procedures when appropriate.

■ EMI/SIG EPISC

The EPISC should:

- Promote, in coordination with the Headquarters PA and NA-EA, the new EPISC social media simulation tool throughout the enterprise for use during EPI training, drills,

and exercises to replicate the high volume of social media activity that is expected during an incident.

- Support development of key EPI/social media training classes on such topics as developing pre-scripted EPI/social media messages, developing social media responses, social media message tone and platforms, identifying and analyzing rumors and misinformation, reporting rumors and misinformation, and social media monitoring, listening, and reporting.
- Establish a complex-wide EPI/social media lessons-learned program to share information with all DOE field element and site contractor public information offices, using (for example) OPEXShare and the DOE Corporate Lessons Learned Database or an internal EMI/SIG communication channel.

■ Headquarters Office of Public Affairs and NNSA Office of External Affairs

PA and NA-EA should:

- Support development of key EPI/social media training classes on such topics as developing pre-scripted EPI/social media messages, developing social media responses, social media message tone and platforms, identifying and analyzing rumors and misinformation, reporting rumors and misinformation, and social media monitoring, listening, and reporting.
- Communicate a complex-wide EPI/social media lessons-learned process for sharing information with all DOE field element and site contractor public information offices, using (for example) OPEXShare and the DOE Corporate Lessons Learned Database.
- Increase Headquarters PA EMT staff participation in scheduled site/facility-level exercises in support of Headquarters and site EPI and social media activities, and training of Headquarters PA EMT staff.

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NNSA, Office of Emergency Management, NA-41
DOE, Office of Environmental Management, Office of Safeguards,
Security and Emergency Preparedness, EM-3.114
Emergency Management Issues/Special Interest Group Emergency
Public Information Subcommittee
Argonne National Laboratory Public Affairs Science and Technology Fusion Cell
NNSA, Nevada Field Office and Mission Support and Test Services, LLC
NNSA, NNSA Production Office and Consolidated Nuclear Security, LLC
DOE, Savannah River Operations Office (Safeguards, Security & Emergency Services)
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Lawrence Berkeley National Laboratory
Lawrence Livermore National Laboratory
Idaho National Laboratory
Sandia National Laboratories

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Scope and Methodology

This study reflects analysis of the integration of social media into EPI activities based on observations, interviews, and data collected from seven sites and three Headquarters public affairs offices. The scope of the study included a representative cross-section of Headquarters offices, including NNSA, Office of Science, and Office of Environmental Management sites, during the January 2019 to June 2020 time period. During that time, the study team observed three full-scale or functional site exercises; reviewed DOE Headquarters and site EPI strategy and policy documents, site EPI emergency program plans and procedures, site EPI ERO training plans, and readiness assurance program documentation; and interviewed site EPI staff and ERO members. The study team visited one additional site that had recently conducted an exercise with significant EPI/social media objectives.

The study team reviewed Headquarters planning to determine, for example, whether EPI/social media strategies, policies, and plans ensure that information being released at all levels is consistent and accurate, and whether they address provisions to coordinate information released after the initial release, including through news releases and social media. The study also examined whether planning is appropriately documented and clearly distinguishable from daily routine public information. A sound EPI/social media strategy allows all the organizations within an agency to develop operational policies, plans, and procedures that define the courses or methods of action selected from among alternatives and, based on specific conditions, to guide and determine present and future EPI/social media decisions.

The study team also explored whether field elements (sites) have well-developed, thorough EPI/social media strategies, policies, and plans to govern implementation of EPI/social media response at all levels of the site's public information organization. For example, an important aspect of planning for an emergency is to identify the public information media to be monitored and used during a response, such as websites, social media, news releases, and news briefings. Another important aspect of planning is establishing the policies and working relationships among the various site contractors and local stakeholders, such as city, county, state, and tribal organizations.

Finally, the study team examined the detailed implementation of EPI/social media strategies, policies, and plans. The capability to respond using social media is developed through detailed resource planning and coordination of procedures, education, and training. Developing a proficient response capability also requires conducting challenging exercises to critically verify the adequacy of performance and to make appropriate improvements where identified.

The study team used DOE Office of Enterprise Assessments Criteria and Review Approach Document 33-08, *Emergency Public Information Social Media*, Rev. 0, March 27, 2019, as the basis for reviewing site EPI program and plans, as well as observing site-evaluated exercises, reviewing EPI strategy and policy documents and site emergency planning and procedure documents, conducting interviews with EPI key staff, and reviewing EPI training.

During the site visits, the study team reviewed site EPI program plans, procedures, and position checklists; EPI ERO training and drill program and site exercise documents; resources, such as staffing and infrastructure; and readiness assurance and lessons-learned program documents, such as documentation of corrective action verification and validation and EPI assessments. Additionally, site public affairs staff and EPI ERO members were interviewed to gain knowledge of the effectiveness of training and drills involving EPI/social media activity, use of social media platforms and simulations during drills and exercises, conduct of EPI assessments, and adequacy of offsite counterpart or stakeholder EPI/social media collaboration, coordination, and training.

The sites that were visited, and three additional sites that provided EPI-relevant documentation for the study, are listed below, along with the associated activities performed by the study team:

- Nevada National Security Site (observed site functional exercise)
- Y-12 National Security Complex (observed full-participation exercise)
- Savannah River Site (completed site functional exercise)
- Los Alamos National Laboratory (observed full-participation exercise)
- Lawrence Berkeley National Laboratory (reviewed EPI documents)
- Idaho National Laboratory (reviewed EPI documents)
- Sandia National Laboratories (reviewed EPI documents).

Additionally, the study team sent a questionnaire focusing on EPI and social media activities to 10 representative DOE sites and public affairs offices, and obtained responses from 6 of those sites/offices:

- Lawrence Livermore National Laboratory
- Lawrence Berkeley National Laboratory
- Idaho National Laboratory
- NNSA Office of Secure Transportation
- DOE Headquarters Office of Public Affairs
- NNSA Office of External Affairs.

Further, the study team interviewed and exchanged emails concerning EPI and the integration of social media during incidents, with the following offices:

- DOE Headquarters Office of Public Affairs
- NNSA Office of External Affairs
- Office of Communications and Public Affairs, Office of Science
- Office of Communications, Office of Environmental Management
- NNSA Office of Secure Transportation.

Finally, study team members searched the Energy.gov website for all applicable documentation associated with Headquarters EPI/social media strategy and policies, plans, and procedures. Study team members also researched other government websites for training websites and classroom instruction (see Appendix B), EPI/social media strategy and policy documents, and procedures for benchmarking purposes. A number of national and international organizations have published studies and guidance highlighting the importance of developing and executing a pre-planned social media strategy. For example, the Department of Homeland Security Science and Technology Directorate's *Operationalizing Social Media for Preparedness, Response, and Recovery* highlights the need to effectively integrate social media into an EPI/social media plan, include social media digital tools in strategy development, and incorporate social media in operational and procedural documentation. Likewise, in "The Health Communicator's Social Media Toolkit, *Developing a Social Media Strategy*," the Centers for Disease Control and Prevention (CDC) identifies that a social media communication strategy should be integrated into overall communication planning, activities, and data collection. The study team accomplished these efforts with the assistance of the ANL PAST Fusion Cell and the EMI/SIG EPISC.

Social Media Training, Key Responsibilities, and Job Qualifications

Social media communications can “make or break” an agency. Before an emergency, social media can build trust and a sense of community with its various audiences. During an emergency, social media can establish the agency as the primary source of trusted, verified information; mitigate rumors and false information; and eventually provide the basis for resolution of the emergency.

Personnel assigned to manage social media accounts are a critical part of an agency’s social media strategy. A study of current social media employment opportunities within the Federal government compared to those in the private sector demonstrates a sharp contrast between the two entities. Within the Federal government, social media management is generally relegated to public affairs specialists and other similar job descriptions. While these positions are frequently described as PIOs or communications coordinators, social media is a subset of responsibilities or relegated to “other duties as assigned.”

In the private sector, however, social media specialists are much sought after and typically have no duties other than managing social media channels. Specialty subsets include audio, video, graphics, photo editing, and multimedia creation. Even the base specialist position in most companies requires a bachelor’s degree and two years of prior social media experience.

■ SOCIAL MEDIA TRAINING

At DOE/NNSA sites, the uniqueness of social media and its demands as a specialized practice should be considered. Given the rapidly changing nature of the social media user, social media channels, and the transmission/delivery systems, education in the area of social media is a continuous process. Social media is a large part of the college and university curriculum in journalism and communications schools, and other similar degree programs. Opportunities for continuing education in social media, although somewhat limited, include the Federal Emergency Management Agency (FEMA) National Disaster Preparedness Training Center at the University of Hawaii, which offers three social media-specific training courses, and the ANL PAST Fusion Cell and National Public Affairs Academy, which offers multiple courses specific to digital and social media.

Also, certain Facebook groups provide social media resources. One such moderated group, the Government Social Media Conference (GSMCON) Official Group, is a source of information that is supported by government social media practitioners, as well as representatives from the owners of the social media sites.

At a minimum, the study team suggests that PIOs, professional communicators, and social media coordinators participate in applicable DOE policies/procedures training, in addition to FEMA’s Emergency Management Institute Independent Study Courses, which cover Emergency Command System concepts, the National Incident Management System (NIMS), and public information and external affairs responsibilities. Additionally, the NNSA Office of Emergency Operations (NA-40) and the EMI/SIG have WBT classes for EPI, crisis communications, and social media activities.

FEMA courses can be found at <https://training.fema.gov/is>. These are online, self-paced courses, free of charge, designed for people who have emergency management responsibilities. To take these courses, students must first register for a FEMA student identification number at <https://cdp.dhs.gov/femasid>. Courses that may be helpful to social media practitioners include:

- G291: JIS/JIC Planning
- E388: Advanced PIO
- E389: Master PIO
- E-952: NIMS Incident Command System (ICS) All-Hazards PIO
- ICS-100: Introduction to the ICS
- IS-29: Public Information Awareness
- IS-42: Social Media in Emergency Management
- IS-100b: Introduction to Emergency Command Systems
- IS-200: Basic Incident Command for Initial Response
- IS-230d: Fundamentals of Emergency Management
- IS-235b: Emergency Planning
- IS-240.b: Leadership and Influence
- IS-241.b: Decision Making and Problem Solving
- IS-242.b: Effective Communication
- IS-247: Integrated Public Alert and Warning System (IPAWS)
- IS-250: Emergency Support Function 15 (ESF-15) External Affairs
- IS-700: NIMS: An Introduction
- IS-702: NIMS Public Information Systems
- IS-800: National Response Framework, An Introduction.

The NA-40/EMI/SIG-sponsored DOE Training for Public Affairs and EPI Staff is available in a WBT format at <https://edms.energy.gov/Content.aspx/LMSInstruction>. The following WBT classes are directly related to EPI and social media training for public affairs and EPI ERO staff members:

- EPI100DE: DOE EPI Overview
- EPI110DW: Crisis Communications
- EPI210DE: The Spokesperson
- EPI220DW: Message Mapping
- EPI250DT: Emergency Writing Skills
- EPI260DT: EPI Education and Outreach
- EPI340DW: JIC Management
- EPI360DW: EPI Planning and Program Administration.

Also, training specific to digital communication and social media may be found at:

- ANL PAST Fusion Cell National Public Affairs Academy, <https://pastfusion.egs.anl.gov/>
- CDC Social Media Tools, Guidelines, and Best Practices, <https://www.cdc.gov/socialmedia/tools/guidelines/index.html>
- Chief Information Officer Department of Defense Social Media Hub, <https://dodcio.defense.gov/Social-Media/SMEandT/Digital>
- Digital.gov University, <https://digital.gov/events/>
- EMI/SIG EPI Subcommittee (2018), “Effectively Managing Facebook for Emergency Public Information,” https://edms.energy.gov/EM/TrainingProducts/Effectively%20Managing%20Facebook%20for%20EPI/story_html5.html
- FEMA Course IS-00042 (2013, October 31) “Social Media in Emergency Management,” retrieved from <https://training.fema.gov/is/courseoverview.aspx?code=IS-42>

National Disaster Preparedness Training Center (NDPTC) at the University of Hawaii, <https://ndptc.hawaii.edu/>. Courses directly related to social media platforms, strategy, and tools and techniques include:

- PER 304: Social Media Platforms for Disaster Management
- PER 343: Social Media Engagement Strategies
- PER 344: Social Media Tools and Techniques.

■ SOCIAL MEDIA SPECIALIST POSITION

Suggested key responsibilities and job qualifications for a social media specialist are listed below and may be modified depending on site-specific needs. As with any essential function at DOE/NNSA sites, cross-training is suggested to ensure continuity and surge capability.

■ KEY RESPONSIBILITIES

- Schedule, post, and manage all content on social media platforms.
- Lead collaboration with cross-functional teams to manage social media internal intake and trafficking, and to process and ensure timely response and notifications to the right team members.
- Monitor social communities to address issues, ascertain their urgency, be a key member of the response team, be a direct link to offsite stakeholders, and ensure consistency in social media actions and activities, voice, and tone.
- Prioritize and route social media escalations to internal stakeholders and identify appropriate solutions and responses.
- Build, maintain, and execute a social media content calendar.
- Develop innovative solutions and creative new ideas for engaging social media campaigns that highlight the organization's actions and activities, and continuously recommend best-in-class ways to improve content.
- Assist in curating content across social media accounts, including but not limited to Instagram, Facebook, and Twitter.
- Play a key role in analyzing and reporting social media content and campaigns and recommend/use tracking systems to gather visitor data and determine efficacy and areas for improving the social media campaign.
- Research target audiences and discover trends for content and campaigns, and present this information to senior leaders.
- Demonstrate thoughtful leadership by staying up to date with best practices and changes in all social platforms to ensure maximum effectiveness; continuously present this information to cross-functional team and public affairs leadership.
- Assist with various assignments, social media-based and beyond, according to the needs of the agency/department.

■ JOB QUALIFICATIONS

- Minimum of bachelor's degree in communications field, with two years of experience in social media account content management, authoring, and design
- Proven work experience in social media platform activities, including Instagram, Facebook, and Twitter
- Background in journalism, communications, English, public relations, or any field related to communications and engagement with others
- Knowledge of and experience with best practices, tools, and processes for publishing original multimedia content, including proficiency with video and image editing tools (such as Adobe Premiere or Final Cut, Photoshop, or InDesign) and web-based tools specific to creation/curation of social media images (such as Canva, Pikochart, Adobe Spark, or Powtoon).

In conclusion, social media communication can no longer be considered part of “other duties as assigned” for the PIO or public affairs officer. The social media specialist position is a highly trained and experienced member of the communications team. While this person will have general expertise in writing, graphics, video, and other public affairs tasks, the capabilities for social media content creation itself have become highly specialized. Not only does the social media specialist need to be hired with that primary responsibility in mind, but that person must also have the opportunity for ongoing targeted training and education.