

EHS&R Newsletter

SECOND QUARTER 2023



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CAMS 2023 Annual Compliance Summit

By Melissa Kinsella, Director, Corporate Marketing Communications & Administration

Nearly 100 leaders from across the CAMS fleet and corporate offices gathered in Houston from June 6 through 8 for the Fifth Annual Compliance Summit. The event was a great success and featured sessions covering a wide range of topics, including safety practices, environmental regulations, ESG, and NERC compliance. Attendees had the opportunity to meet with their peers from all over the US and share lessons learned and best practices.

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CAMS 2023 Annual Compliance Summit (cont.)

One of the most interesting sessions was about safety practices and how they can be improved to ensure the safety of our employees and customers. Another session focused on environmental regulations and how we can reduce our carbon footprint.

CAMS also sponsored a social event at the Buffalo Bayou Brewing Company to give the out-of-town visitors a taste of Texas hospitality and a chance to extend discussions in an informal environment. We look forward to seeing everyone at their sites in the coming months and as a team when we meet again next year.

Summit Highlights!



Starting off the event strong with an introduction from CAMS CEO, Joseph W. Sutton.

Day one was full of informative and compelling presentations given from the Health & Safety department.



Before starting, plant managers, partners, and CAMS employees had a chance to make connections and network.

CAMS Health and Safety: Outage Fundamentals

By , Ben Vodila, VP Health & Safety

Effectively Managing Risk

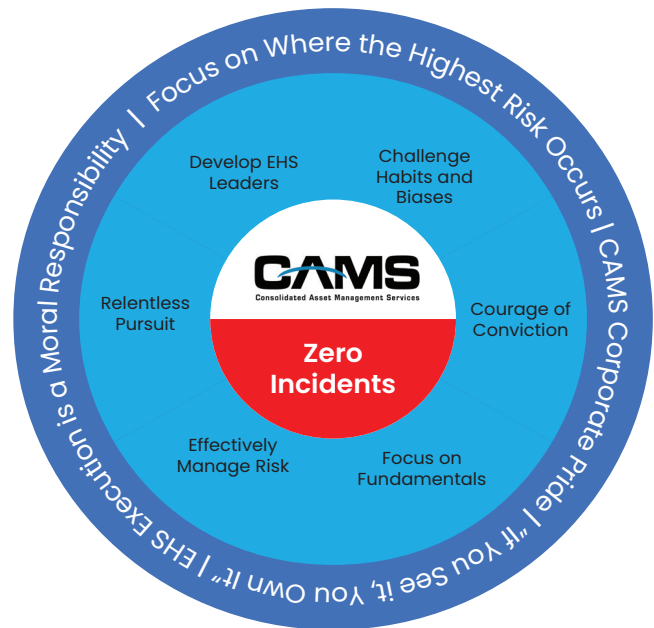
The Health and Safety of CAMS employees, contractors, customers, and communities is paramount and is rigorously pursued in alignment with CAMS' commitment to conducting business in a manner that respects and protects the environment. In all our actions, we leverage the CAMS EHS Vision and strategies to achieve world-class results for CAMS and our clients. The annual Spring and Fall planned maintenance outages are opportunities for us to Focus on where the Highest Risk Occurs, as well as Effectively Manage Risk.

Outages involve equipment inspections, repairs, replacements, and upgrades to improve plant performance. Without regular plant outages, equipment can become worn or outdated, leading to reduced efficiency, downtime, and safety hazards. The increased maintenance activities and more frequent use of contractors during outages carry a higher risk of incidents and injuries. The CAMS H&S Team is happy to assist in planning strategies, and for high-risk activities, we can provide additional boots on the ground to promote safe work practices.

Safety Findings

Common positive safety findings during plant outages include the implementation of new safety procedures related to lockout/tagout or new personal protective equipment (PPE) requirements, the installation or update of safety equipment such as improved fire suppression systems or upgraded safety guards on machinery, and improvements in employee training programs, new safety training modules or safety refresher courses. We often observe positive shifts in safety culture, such as increased employee engagement in safety initiatives, or the creation of a safety committee to oversee high-risk activities.

Safety findings during a plant outage typically revolve around potential hazards and unsafe conditions. These findings are identified through



routine inspections, incident investigations, and other forms of safety assessments. Common safety findings during plant outages include:

- Electrical hazards: exposed wires, damaged electrical equipment, or improper grounding. Electrical hazards can lead to electric shocks, electrocution, and fires.
- Chemical hazards: hazardous material leaks or spills, improper storage, or inadequate ventilation. Chemical hazards can lead to health effects, such as respiratory problems or chemical burns.
- Physical hazards: slip, trip, and fall hazards, such as debris or obstacles on walkways, or hazards associated with equipment operation such as pinch points or unguarded machinery.
- Fire hazards: improper storage of flammable materials, improperly maintained equipment, or inadequate fire protection systems.

CAMS Health and Safety: Outage Fundamentals (cont.)



Once safety findings are identified, it is crucial to promptly take appropriate corrective actions to mitigate the hazards and prevent potential accidents or injuries. The well-being of our employees, contractors, customers, and communities is of utmost importance, and we are committed to maintaining a safe working environment. In cases where hazards pose an immediate threat to safety, we are empowered to use Stop Work Authority, allowing us to halt operations until the hazards are effectively addressed.

Appropriate corrective actions can take various forms, depending on the nature of the identified hazards. In some instances, it may be necessary to shut down specific equipment or temporarily close certain areas of the plant until the hazards have been mitigated. This proactive approach ensures that the safety of everyone involved remains the top priority.



Regular safety inspections and assessments are a vital component of our commitment to ongoing safety. Even during plant outages, we prioritize the identification and resolution of hazards. By conducting routine inspections, we can proactively identify potential risks, address them promptly, and prevent incidents from occurring. This proactive approach enables us to maintain a safe working environment, even in challenging circumstances. These dedicated efforts, along with the implementation of safety procedures, employee training programs, and the use of advanced safety equipment, contribute to our overarching EHS Vision – Zero Incidents.

CIP Standard for Low Impact Facilities

By Kyle Tobias, NERC CIP and Cyber Security Officer



On March 16, FERC issued a new order approving NERC CIP-003-9. The revision to the standard adds new responsibilities for CIP low impact sites and is scheduled to take effect on 4/1/2026.

At the site level, you will need to formally have methods to know when vendors are remotely accessing your systems and the ability to enable or disable these methods where needed. This new documented process will need to have supporting evidence which will be entirely dependent on what method is used at your site. For many of you, this will not change much functionally as you are already doing much of this. Documenting and logging that you are doing it will satisfy the compliance requirements.

For example, there are some sites that have added physical A/B switches to the ethernet cables that handle remote connections. This may not have been formally stated in any process documents so adding it to the CIP-003 procedure satisfies compliance with that portion. Documenting the existence of the switch with an updated site network diagram will also provide some of the evidence needed.

At the corporate level, we will be evaluating your site firewall access control rules over the course of the next year to ensure these are already compliant and make any adjustments where needed. We will be updating the standard CAMS CIP-003 process documents to address this issue at that level and will work with each site to ensure what is stated in that procedure fits your site's abilities and requirements.



Anytime NERC adds new responsibilities to the low impact sites it gets attention, and rightly so. Most of the CAMS fleet, much like the US generation fleet, are CIP low impact. Even though in this instance we have three years to ensure we are compliant, we are already working on this to get ahead of it with plenty of time to fine-tune the methods and related evidence-collection processes, tailored to your site's needs. Our goal is to make sure that our sites are fully compliant with the new standards and that we are able to provide the necessary evidence to demonstrate our compliance. Expect to hear from your CAMS NERC compliance team. By working together, we can ensure a streamlined transition to the new standard and maintain our commitment to providing safe and reliable service to our customers.

CIP Standard for Low Impact Facilities (cont.)

The updated standard adds the following language to the requirement section for CIP low impact sites:

Vendor Electronic Remote Access Security Controls: For assets containing low impact BES Cyber System(s) identified pursuant to CIP-002, that allow vendor electronic remote access, the responsible entity shall implement a process to mitigate risks associated with vendor electronic remote access, where such access has been established under Section 3.1. These processes shall include:

- One or more method(s) for determining vendor electronic remote access
- One or more method(s) for disabling vendor electronic remote access
- One or more method(s) for detecting known or suspected inbound and outbound malicious communications for vendor electronic remote access

Evidence Examples Provided for this New Requirement are:

Part 1 Security Operations

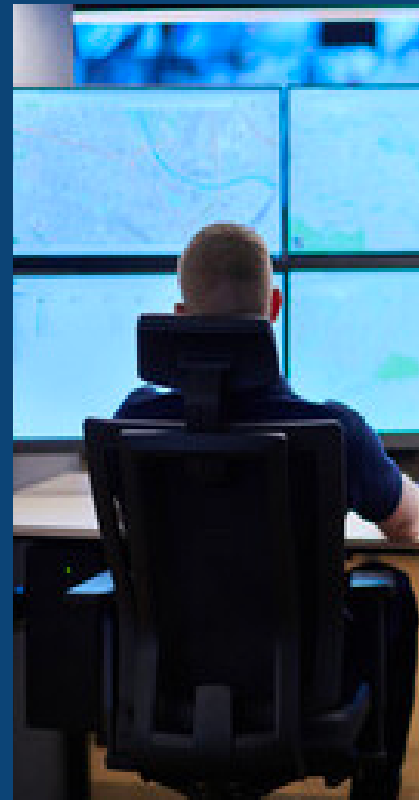
- One step to preauthorize access
- Alerts generated by vendor log on
- Session monitoring
- Security information management logging alerts
- Time-of-need session initiation
- Session recording
- System logs; or other operational, procedural, or technical controls

Part 2 Network Security

- Disabling in/outbound hardware, software ports, services, access permissions on applications, firewall, IDS/IPS, router, switch, VPN, and Remote Desktop.
- Disabling communications protocols used for systems which establish and maintain vendor electronic remote access
- Removing physical layer connectivity (e.g., disconnect an Ethernet cable, power down equipment)
- Administrative control documentation listing the methods, steps, or systems used to disable vendor electronic remote access; or other operational, procedural, and technical controls

Part 3 Malware Security

- Anti-malware technologies
- Intrusion Detection System (IDS)/Intrusion Prevention System (IPS)
- Automated or manual log reviews
- Alerting; or other operational, procedural, or technical controls



Middletown Power: A Story of Community Outreach



Middletown Power Facility

Middletown Power is situated on the western bank of the Connecticut River, in Middletown, Connecticut. The 953 MW facility includes three steam electric generating boilers, five combustion turbines, an auxiliary boiler, and two glycol boilers. The facility is owned by Generation Bridge, LLC, managed by Eastern Generation, and operated by CAMS.

Community Outreach

Middletown employees demonstrate their commitment to community outreach and

service through numerous volunteer activities. One example is their long-term affiliation with the For Inspiration and Recognition of Science Technology (FIRST) program through their relationship with the Xavier High School FullMetal Robotics team, the FullMetal Merlins. The team is comprised of more than 40 students who design, build, program, and test robots to compete in FIRST tournaments. Under the leadership of Nick Mainetti, Maintenance Manager at Middletown, the students not only hone their robotics skills, but also learn project management, communication, organizational, and technical skills.

Shaping the Future

This year, under Mainetti's guidance, the FullMetal Merlins, garnered numerous accolades, becoming finalists at four events, semifinalists at the state championship, and winners of two other events. They also secured the Motivate Award, which is given to the team that incites the most people to engage in robotics, and the prestigious Raytheon Technologies Innovate Award, which celebrates the team with the most innovative robot. Mainetti's effective mentorship is shaping the future of these aspiring engineers and technologists while exemplifying the CAMS value to enrich the communities in which we live and work.



Corporate Office Safety: CPR/AED Training

By Jake DeLisle, Health & Safety Associate



Learning the Fundamentals

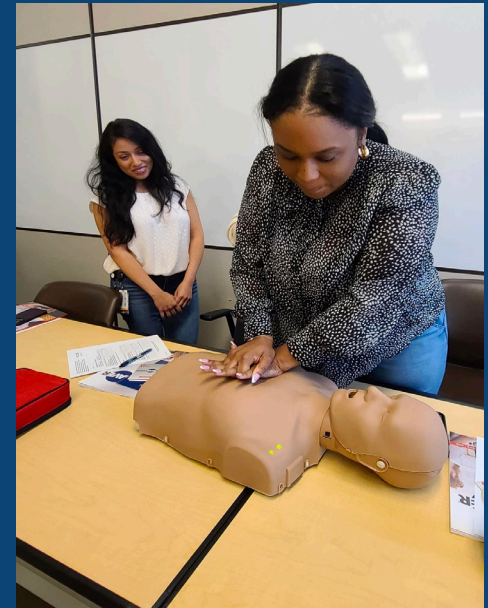
CAMS Senior Leadership hosted an American Heart Association CPR, AED, and First Aid class on April 27, 2023 in the Houston corporate office. Approximately 30 participants learned life-saving fundamentals such as how to perform resuscitative measures for those suffering from acute myocardial infarction. Additionally, participants learned to recognize choking in adults, children, and infants, and how to react appropriately during a choking event.

Our Goals

Participants practiced hands-on skills using dummies to test for proper hand placement, chest compression depth, and medical event team working skills. While this has applicability to all aspects of our employees' lives, CAMS conducted this training with the following goals in mind:

- Empower employee response during an emergency
- Promote safe use of Office First Aid / AED Equipment
- Increase Hazard Recognition
- Foster and grow our Corporate EHS Culture
- Reduce recovery time for employees following an incident

The instructor, Ronald Cooley, brings decades of experience working at Harris County Emergency Corp, HCA Healthcare Corp, Goodman Manufacturing, and Amazon. He currently owns and operates a CPR company, providing services across all industries. CAMS would like to thank Ronald, Melissa Kinsella, Karl Pflughaupt, and Jake DeLisle for facilitating the event.



We were pleased to be able to host this important event. The topics covered are in direct alignment with the CAMS Leadership focus on the health and safety of CAMS employees.

-CAMS Team-

EPA’s 2023 Proposed Power Plant GHG Standards

By Micheal Kreter, Environmental Associate and Derek Furstenwerth, SVP, Environmental Services

On May 11, 2023, the U.S. Environmental Protection Agency (“EPA”) proposed emission limits and guidelines for carbon dioxide (“CO₂”) from fossil fuel-fired power plants. The proposals would set limits for new gas-fired combustion turbines, existing coal, oil, and gas-fired steam generating units (“boilers”), and certain existing gas-fired combustion turbines (“CT”). The proposed standards are based on technologies including carbon capture and sequestration/storage (“CCS”), low-greenhouse gas (“GHG”) hydrogen co-firing, and natural gas co-firing. A description of the effects of the changes is described for each unit category below.¹

Existing Gas-Fired Combustion Turbines

For existing gas-fired combustion turbines, EPA proposes to implement standards only for turbines greater than 300 MW capacity that operate at higher than a 50% capacity factor. Two compliance options, based on technology, are proposed:

1. CCS– By 2035, units would be required to be highly efficient and meet an emissions reduction equivalent to CCS with 90% CO₂ capture (90 lb CO₂/MWh).
2. Low GHG-Hydrogen – By 2032, units would be required to be highly efficient and meet an emissions reduction equivalent to co-firing 30% by volume low-GHG hydrogen, or 680 lb CO₂/MWh.² By 2038, the emission reduction would have to equal co-firing 96% low-GHG hydrogen (90lb CO₂/MWh).

Although EPA bases these standards on particular technologies, compliance with the standard does not require implementation of that technology, only compliance with the emission standard. In other words, EPA based the 680 lb CO₂/MWh standard on the use of 30% hydrogen, but doesn’t actually require the use of 30% hydrogen, just compliance with the rate limit.

¹ EPA also proposes to repeal the Affordable Clean Energy Rule, which was issued in 2019 under the Trump administration.

² A 680 lb CO₂/MWh standard is equivalent to a natural gas-fired CCGT with a heat rate just under 5,900 Btu/kWh.

Turbine Load Peaking	Capacity Factor	Applicable Year	Standard (lb CO ₂ /MWh)
Low Load (Peaking)	<20%	N/A	None Proposed
Intermediate Load	20% - %50 (approx.)	N/A	None Proposed
Baseload (<300 MW)	>50%	2023	680
Baseload (>300 MW)	>50%	2023 or 2038	90

Table 1 Existing Combustion Turbine Proposed Limits

EPA’s 2023 Proposed Power Plant GHG Standards (cont.)

New and Modified Fossil-Fuel Fired Turbines³

EPA is proposing updates to New Source Performance Standards (“NSPS”) for new or reconstructed fossil fuel-fired CTs, as well as more protective standards based on highly efficient generating practices in addition to CCS or co-firing low-GHG hydrogen. EPA is proposing emission standards for low load (peaking), intermediate load, and base load subcategories. Further information on changes to this category of turbines will be provided at a later date as the CAMS fleet is comprised of existing CTs.

³ Under the proposed rule, a new unit is one which commenced construction after January 8, 2014. A modified or reconstructed unit is one which commenced modification or reconstruction after June 18, 2014.

Existing Gas- and Oil- Fired Boilers

EPA proposes standards for existing gas- and oil-fired boilers be based on through routine methods of operations and maintenance. The applicable emission limitation is no increase in a unit’s emission rate. EPA also proposes to repeal the Affordable Clean Energy Rule, which was issued in 2019 under the Trump administration. A 680 lb CO₂/MWh standard is equivalent to a natural gas-fired CCGT with a heat rate just under 5,900 Btu/kWh.

Existing Coal-Fired Boilers

EPA proposed four subcategories for existing coal-fired boilers, based upon the operating horizon of the unit. The technology basis, emission reductions, and compliance deadlines are as follows:

Subcategory	Description	Technology Basis	Emission Limitation
Long-term	Units that will operate past December 31, 2039	CCS with 90% CO ₂ capture by 2030	88.4% reduction in emission rate
Medium-term	Commit to permanently shut down before January 1, 2040 AND are not near- or imminent-term	Co-firing 40% (by heat input) natural gas by 2030	16% reduction in emission rate
Near-term	Commit to an annual 20% capacity factor and permanently shut down before January 1, 2035	Routine methods of operation and maintenance	No increase in unit-specific baseline emission rate
Imminent-term	Commit to permanently shut down prior to January 1, 2032	Routine methods of operation and maintenance	No increase in unit-specific baseline emission rate

Table 2 Existing Combustion Turbine Proposed Limits

Implementation

In this rulemaking, EPA is issuing emissions standards, which are then implemented by the states. While EPA is fairly constrained in how such standards are developed, states have much more flexibility in implementing them. To that end, EPA has proposed to allow states to use participation in a trading program to be their means of compliance with the standards. States would have to demonstrate that participation in the program would deliver at least as many emission reductions as EPA’s standards. This provision would allow states to participate in RGGI, the California Cap-and-Trade program, or similar programs, instead of directly implementing the lb/MWh limits. This might mean that RGGI or California would have to reduce emission budgets downward, but would allow participation in that program as an alternative for sources in those states.

EPA requested input on where to set standards for subcategories for which no standards were proposed, in particular for combustion turbines. EPA indicated that such standards would be proposed and adopted in subsequent rulemaking.

CAMS Team Helps Birdies for Boys & Girls Raise \$40K



Our Tradition

The Northern Star Generation Services Company Florida plants, operated by CAMS, have a long-standing tradition of supporting the Boys & Girls Clubs of Polk County. One way they show their support is by sponsoring the annual golf tournament “Birdies for Boys & Girls.” This year, the CAMS team helped coordinate and participated in the 13th annual golf tournament. Their efforts paid off as they were able to raise over \$40,000 for the cause. In particular, Brian Mallory and Connie Tevelson devoted numerous hours to making the event a success. Their hard work and dedication helped make a difference in the lives of the children in Polk County.



The Boys & Girls Club

Boys & Girls Clubs fill the gap between school and home. They provide welcoming, positive environments in which kids and teens have fun, participate in life-changing programs, and build supportive relationships with peers and caring adults. The Clubs offer a wide variety of programs to meet the needs of various ages and interests, such as leadership development and volunteering opportunities, homework help, computers, games, sports, dance, photography, arts and crafts, and youth employment.

New Mercury and Air Toxic Standards

By Michael Kreter, Environmental Associate

On April 24, 2023, the United States Environmental Protection Agency (“EPA”) published proposed amendments to the National Emissions Standards for Hazardous Air Pollutants (“NESHAP”) for coal- and oil-fired electric utility steam generating units more commonly known as the Mercury and Air Toxic Standards (“MATS”). The amendments, as written, could impose some problematic monitoring requirements on the CAMS-managed coal facilities, but oil-fired units in the CAMS fleet will likely be exempt from most provisions.



Proposed Changes

EPA must establish and periodically review standards for major sources of Hazardous Air Pollutants (“HAP”). As a result of the review process, EPA has developed the following proposed changes to the MATS Standards:

- Strengthen the standard for non-mercury (“Hg”) metals, measured as filterable particulate matter (“PM”), for existing coal-fired electric generating units (“EGU”) from the existing emission limit of 0.030 pounds per million British thermal units (“lb/MMBtu”) to 0.010 lb/MMBtu.¹
- Remove the compliance demonstration option for low-emitting EGUs (“LEE”), under which units that emit PM well below the current standard for at least 36 months are only required to demonstrate compliance via performance testing once every 36 months.

- Revise the compliance demonstration requirements to require that all coal-fired EGUs install and operate a PM continuous emissions monitoring system (“CEMS”).
- Establish a more protective Hg emissions standard for existing EGUs that fire lignite coal.²
- Tighten the definition of startup by eliminating the time-based definition of four hours and defining startup as the period of combustion prior to the sale of electricity following the start of combustion.

² No facilities in the CAMS fleet burn lignite coal, and therefore this provision of the proposed rule is not discussed further.

¹ EPA also solicited comments on a PM emission limit reduction to as low as 0.006 lb/MMBtu during a virtual public hearing on May 9, 2023.



New Mercury and Air Toxic Standards (cont.)



Compliance Timeline

The proposed rule allows up to three years from the effective date for affected EGUs to comply with the new PM emissions limit.^{3,4} Compliance with the proposed 0.01 lb/mmBtu emission limit would be demonstrated on a 30-boiler operating day rolling average basis. Affected units will have three years from the effective date to install and certify a PM CEMS. Finally, affected EGUs will be subject to the revised unit startup definition within 180 days of the effective date of the rule.

³ The effective date varies by each final ruling, but is typically at least one month after a final rule is published in the Federal Register.

⁴ EPA is soliciting comments on whether more than one year is needed to comply, considering the need to upgrade control systems.



Impact on the CAMS Fleet

EPA is not proposing to revise emission standards for existing oil-fired EGUs. Most oil-fired EGUs in the CAMS fleet are limited-use boilers and are thus not subject to most of the provisions of the rule.

The coal-fired facilities impacted by this proposed rule are Gavin, Merom, Keystone, and Conemaugh Generating Stations. All four facilities are anticipated to comply with the proposed PM emissions limits, based on recent testing data. The requirement to install and operate PM CEMS is problematic from the perspective that PM CEMS do not provide a reliable measurement of actual PM emissions, particularly on facilities equipped with wet flue gas desulfurization, as all four facilities are. This issue will be addressed in formal comments to the proposed rule. If you have any questions about MATS, please contact your Environmental Services Department representative.

Innovative Projects at Griffith Aim to Reduce Environmental Impacts



Griffith Energy (“Griffith”) is a 570 MW gas-fired combined-cycle generation facility, located in Mohave County, Arizona, near the California and Nevada borders. Griffith is a highly efficient resource that serves the rapidly growing Desert Southwest power market and sells summer capacity and electricity to a regional load-serving entity under a long-term contract. The facility is owned by Griffith Energy, LLC, an ArcLight Capital Partners, LLC (Fund VII) company, and is managed by CAMS.

Griffith’s management team continually seeks ways to efficiently operate the facility, with consideration of environmental impacts and the desert conditions surrounding the plant. For example, the team has identified a way to reclaim wastewater from its evaporation pond to provide low-volume feed to the raw water solids contact unit. The test period for this project began this quarter.

The site will also be installing rooftop solar on all buildings, with a peak capacity of 700kW. The project is expected to be completed in late third quarter or early fourth quarter 2023. As each rooftop is completed, that sub-system will be put into service. Power generated from the system will be used to reduce station service costs.



In addition to the facility’s excellent reliability record, Griffith’s management team continually advances great ideas to improve and ensure compliance with environmental requirements.



Lawrenceburg Mitigates Environmental Risk

Michael Kreter, Environmental Associate



Going Above and Beyond

Lawrenceburg Power (Lawrenceburg) is a ~1,200 MW natural gas-fired power project owned by Lightstone Generation, LLC, and operated by CAMS. Lawrenceburg recently removed the last large concentration of ethylene glycol from the plant's startup heater. By removing the 2,920-gallon mixture of 25% ethylene glycol, 25% propylene glycol, and 50% water, Lawrenceburg has eliminated the possibility of a hazardous spill that would also result in a reportable quantity ethylene glycol release (2,161 gallons of the mixture). Once the heater is inspected, it will be refilled with a 50-50 mixture of propylene glycol and water. Propylene glycol, which is less hazardous to the environment, is not an EPA-listed hazardous chemical and has no associated reportable quantity threshold.

Send Us Your News!

Whether you are participating in a volunteer effort, spearheading an ESG initiative, or implementing an innovative project, we want to learn about it and highlight your achievements in our next newsletter. Your experiences are what make our community vibrant and dynamic. Please send a brief write-up and pictures, if available, to Mona Johnson at mjohnson@camstex.com.



BUSINESS ETHICS

Confidential Reporting

CAMS complies with the highest level of governance standards, and we stand by our Code of Ethics and Business Conduct. We believe it is important to allow for suspected violations to our code to be reported anonymously to help us further safeguard our stakeholders' confidence and protect our reputation.

CAMS' CONFIDENTIAL REPORTING PROVIDES THE ABILITY TO REPORT ETHICAL OR OTHER ISSUES THROUGH A THIRD-PARTY VENDOR, ANSWERFIRST, THAT CAN BE ACCESSED BY CALLING 346-500-6288.

Confidential reporting through AnswerFirst complements our current reporting practices, as outlined in our Code of Ethics and Business Conduct, which available for download from Fuse at My Company->Documents.

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