

Anchoring Intrinsic Safety: Research on the Collaborative System of "Responsibility - Training - Prevention - Institution"

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ABSTRACT

Safety in production is of paramount importance for safeguarding people's lives and property, maintaining social stability, and promoting high-quality economic development. It also serves as a significant indicator of a country's modernization in its governance system and capacity. Since the 18th National Congress of the Communist Party of China, General Secretary Xi Jinping has attached great importance to production safety, making a series of important expositions on this topic. These have provided fundamental guidance and injected strong impetus into production safety work in the new era, driving a steady improvement in the national production safety situation. The Fourth Plenary Session of the 20th Central Committee further emphasized: "It is necessary to ensure production safety and maintain stability, firmly press and fulfill production safety responsibilities, strictly implement various regulatory systems, and resolutely prevent and curb the occurrence of major and catastrophic accidents." It also explicitly stipulated that planning and formulation should adhere to the principle of coordinating development and safety. This core idea not only sets the direction for production safety work in the new era but also lays a solid foundation for building a national reserve safety system compatible with Chinese-style modernization.

KEYWORDS: Workplace Safety, Reserve Safety, System Construction, Hidden Risk Management.

I. Anchoring the Core of Responsibility: Abandoning a Complacent Mindset and Strengthening Individual Safety Responsibility Awareness

The foundation of production safety lies in people. The driving force behind people's behavior stems from a sense of responsibility, and the lack of such awareness often serves as the fuse for accidents. A large number of accident cases have proven that the vast majority of production safety accidents are not caused by force majeure but rather by individuals' complacent mindset of "it won't happen to me" and a passive attitude of "responsibility has nothing to do with me." Based on recent practical observations, there is currently a problem of ambiguous boundary responsibilities for production safety in some fields. For example, some warehouses incorrectly assign the responsibility for hidden danger investigation and rectification, which should be undertaken by themselves, to regulatory authorities, turning

regulatory departments into "safety nannies." This misallocation of responsibility is extremely risky. Therefore, strengthening individual safety responsibility awareness must be regarded as the primary link in constructing a systematic safety defense line. On the one hand, it is necessary to clarify the main bodies of safety responsibility, enabling every practitioner to clearly understand their roles and responsibilities in production safety and actively become direct implementers of safety management. On the other hand, practitioners should be guided to deeply understand that "safety is not only a requirement of the system but also an inherent need for self-protection" and to establish the perception that "they are the guardians, core participants, and primary beneficiaries of safety." Only in this way can external safety requirements be transformed into internal action initiatives, elevating rules and regulations from written clauses to safety

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beliefs, and driving a shift in safety concepts from "I am required to be safe" to "I want to be safe."

II. Consolidating the Foundation of Training: Enhancing On-the-Job Empowerment and Creating a Favorable Safety Work Atmosphere

If responsibility is the core of safety awareness, then training is the key link that transforms responsibility into practical capabilities. Improving the safety awareness of practitioners is inseparable from systematic and targeted on-the-job training. Only through professional training and in-depth learning can cognitive misconceptions be corrected, enabling practitioners to truly understand that "production safety is directly linked to personal interests," clarify that they are the primary beneficiaries of safety management, and abandon the passive mindset of "relying on external supervision." In the implementation of training, the principle of "being demand-oriented and practice-centered" should be adhered to. Safety managers should plan training content from the perspective of practitioners, focusing on "training what is needed for work and supplementing what is lacking for personnel." Training plans should be customized according to the key and difficult issues in frontline work and combined with actual scenarios to ensure that practitioners acquire "expert skills" and become "professionals." As President Xi Jinping emphasized, "Without extensive learning across the entire Party and comprehensive training for cadres, there will be no significant development of the cause." Carrying out "extensive learning, comprehensive training, and thorough implementation" is not only an inevitable requirement for addressing the shortcomings in the quality and capabilities of practitioners but also a practical path for cultivating the excellent skills needed to safeguard and manage "China's national reserves," injecting professional vitality into the safety work atmosphere.

III. Focusing on the Key of Prevention: Adhering to Proactive Control and Enhancing Risk Identification and Hidden Danger Governance Capabilities

After responsibilities are clarified and training is well-implemented, prevention becomes the key measure to prevent accidents. Production safety is related to people's well-being and is an uncrossable bottom line for development. It is essential to always maintain a high level of vigilance in production safety, place "people's life safety" at the forefront, take into account the "political, economic, and livelihood implications" of production safety, and approach production safety work from a political and

overall perspective with the aim of "ensuring absolute safety" and a strong sense of vigilance against "a single lapse leading to complete failure." We must resolutely uphold the bottom line of preventing major and catastrophic production accidents. As the core means of prevention work, hidden-risk management involves not only the identification and control of potential risks but also a high degree of attention to detail. Many major hidden risks originate from negligence in a certain link or simplification of procedures in daily work. If not addressed in a timely manner, minor oversights can evolve into the trigger for accidents. Therefore, a "full-chain closed-loop mechanism" needs to be established for hidden-risk management. Firstly, guided by the concept of the "three musts," which means the industry sector must manage safety, the business sector must be responsible for safety, and the production sector must ensure safety, the safety red line and bottom line should be firmly upheld. Secondly, in-depth identification of major risks and hidden risks should be carried out, and efforts should be concentrated on solving undetectable or unforeseen problems, especially potential risk factors, with increased investment of manpower and energy. Thirdly, proactive governance measures should be formulated in accordance with laws and regulations to crack down on violations. Fourthly, the responsibility for risk hierarchical control at all levels, departments, and positions should be firmly implemented to avoid having responsibilities remain on paper. At the same time, internal and external supervision, inspection, and risk monitoring and early warning should be strengthened to eliminate every hidden risk with a "zero-tolerance" attitude.

IV. Strengthening Institutional Guarantees: Implementing Proactive Measures and Tightening Source Safety Defenses with Rigid Mechanisms

The long-term implementation of prevention work cannot be achieved without the rigid constraints of institutions. The core of safety management lies in "preventing problems before they occur." Implementing proactive measures essentially means shifting the focus of management from post-event disposal to pre-event prevention. By constructing a sound institutional system, risks can be identified, controlled, and eliminated from the source, building an "impenetrable defense line" for production safety. The proverb "Those who are skilled at swimming drown, and those who are good at fighting are killed" profoundly reveals the safety principle that "no matter how high one's skills are, negligence can be fatal." The value of institutions lies precisely in avoiding negligence through strict regulations. On the one

hand, it is necessary to standardize operational procedures through institutional requirements, clarify safety operating procedures for each position, and refine pre-operation steps such as "wearing protective equipment, checking equipment status, and confirming environmental safety" to eliminate behaviors like "taking shortcuts to save trouble" at the procedural level. On the other hand, it is essential to address the problem that institutional deficiencies are easy to detect, but poor implementation is difficult to resolve. Currently, some practitioners have a weak awareness of safety and lack the initiative to implement rules and regulations. When dealing with abnormal situations, they tend to take shortcuts and ignore standard procedures, leading to frequent elementary mistakes. Therefore, a two-pronged approach is required. Not only should rules and regulations education be strengthened to make practitioners familiar with and gain their recognition of the regulations, but also strict supervision and reward and punishment mechanisms should be established to seriously deal with violations and prompt practitioners to develop the habit of

complying with regulations, avoiding non-compliant operations and risky operations.

From anchoring the core of safety awareness in "responsibility" to consolidating the foundation of safety capabilities through "training," then to blocking the path of accident occurrence with "prevention," and finally ensuring long-term implementation with "institutions," the "responsibility - training - prevention - institution" system jointly forms a complete closed loop for production safety. Enhancing the safety awareness of practitioners is a long-term and systematic project. It is necessary to drive the shift in safety concepts from the passive acceptance of "I am required to be safe" to the active pursuit of "I want to be safe" and ultimately achieve the proficient application of "I know how to be safe." Only by continuously strengthening safety culture construction, improving the responsibility system, optimizing training mechanisms, and strengthening institutional guarantees, as well as paying attention to the physical and mental health of practitioners, can a solid safety defense line be truly established and intrinsic safety be achieved.

