

Organizational



Ask yourself these questions: Would I have less job-related stress if I reported directly to operations? Would I prefer to report to the corporate SH&E group? Would I be more effective if I reported to human resources (HR)?

The theory of organizational choice is premised on an organization electing to structure itself by product or by function (Shafritz, Ott & Jang, 2005).

An organization may structure support functions, such as assigning a safety professional, a quality specialist or an HR staff member, to a particular product line, with a direct line to operations (those who manage the outcome of a manufacturing process). This is a decentralized structure. In this scenario, the safety professional is the safety expert for that particular division. In some cases, this practitioner has a dotted-line relationship to the corporate SH&E group. Alternatively, s/he may work independently of the corporate group, or such a group may not exist.

Another common structure groups functions together; this is termed a centralized structure. It features a center of expertise to which all individuals in a particular function belong (e.g., SH&E department, HR department).

Figures 1 and 2 (p. 58) depict these reporting structures in a manufacturing setting. Figure 1 shows the safety professional who works directly for an opera-

tions manager and has a dotted-line relationship to the corporate SH&E group (decentralized). Figure 2 depicts an SH&E professional who reports directly to an SH&E group (centralized) and has a dotted-line relationship with a particular part of the manufacturing facility (e.g., assembly line A, maintenance).

Many variables (e.g., company size, span of control, safety climate) affect the reporting relationship for safety professionals, although ideally the structure would allow SH&E professionals to be as effective as possible. For example, Montante (2006) argues that confusion and misunderstanding surrounding how to define and manage safety can impede practitioners' ability to achieve the desired level of safety performance. Because role stressors can affect an individual's ability to be effective (Kahn, Wolfe, Quinn, et al., 1964; Singh, 1993), considering the role of reporting relationships in terms of the level of stress experienced is a starting point in understanding whether one reporting structure is better than the other.

Petersen (1975) provides clarity on the best type of reporting scenario. His approach includes: 1) reporting to a boss with influence; 2) reporting to a boss who wants safety; 3) having a channel to the top; and 4) placing safety under the executive in charge of the major activity. While ideal, such a reporting relationship is easier stated than experienced.

To understand why these four elements are difficult to achieve, let's view the safety professional's role today through the lens of classical and modern structural theory.

Theory & the Safety Professional's Role

The safety professional's role is complex. In fact, the safety profession has been described as difficult to define (Ferguson & Ramsay, 2010); as experienc-

IN BRIEF


- This article explains the pros and cons of centralized and decentralized reporting structures, each of which is associated with different levels of work stress.
- It also reviews which structure safety professionals prefer and suggests actions that can reduce the stress associated with each reporting type.

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Reporting Structure

Its Effect on SH&E Professionals

By Wanda D. Minnick



ing an identity crisis (Lawrence, 2008); and as not recognized by the general population (Hill, 2006). One reason for this complexity is that the SH&E professional is considered a boundary-spanning position in which interaction with all levels of an organization is expected, leading to the role's responsibilities lacking clarity. As a result, the classic organization theory that suggests unity of command (taking orders from one boss) as ideal is not seen consistently in practice.

Due to the function's boundary-spanning nature, SH&E professionals often answer to more than one person both internally (multiple positions of authority at all levels) and externally (e.g., OSHA). Fayol (1916; as cited by Shafritz, Ott & Jang, 2005) concedes that when two managers in a higher position of authority exert their power over the same person, the person is negatively affected. An example would be a direct order from a safety professional's immediate manager and a conflicting order from the manager of the line s/he supports. Another example might be balancing safety priorities with environmental and security issues on a daily basis.

Safety professionals primarily advise, warn and counsel, which aligns directly with the definition of a staff function. The opposite of a staff position is a line function: those that contribute directly to attainment of the organization's objectives (Knotts). Modern structural organizational theory provides a framework for describing the placement and advisement function of the safety professional's role within an organization. Mintzberg (1979) describes an organization in terms of a large base that is the operating core: the operators who execute the organization's basic work. The middle line represents those who connect the operating core to the top via a formal line of authority (unity of command).

Mintzberg considers the top of the organization the strategic apex, the conceptual and visionary level. He considers 'staff' functions to be those who advise, consult and counsel at every level of the organization (e.g., safety, quality, trainers, occupational development and learning), and places them off to the side. Figure 3 (p. 59) illustrates the placement of a safety professional according to Mintzberg's structural theory.

Mintzberg (1979) explains the intentional placement of the staff functions off to the side by indicating that they are "separate from [the] main line of authority, and influence the operating core only indirectly" (p. 221). According to Mintzberg, staff functions have functional authority in contrast to formal authority, which means they provide counsel and guidance that help govern operations or perform specific service activities (Allen, 1955; as cited by Mintzberg). These boundary-spanning positions inherently deal with organizational uncertainties (Thompson, 1957; as cited by Mintzberg).

When one is required to interact with all levels, each level of the hierarchy may set different expectations and priorities. Research indicates that employees in boundary-spanning positions are prone to role stress (Kahn, et al., 1964; Singh, 1993), specifically role conflict and role ambiguity.

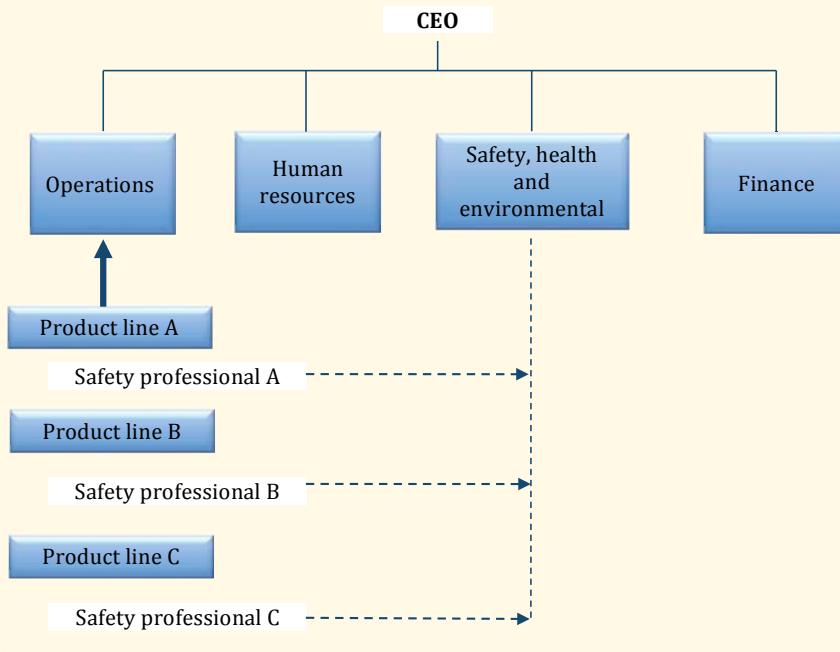
What are role conflict and role ambiguity, and which type of reporting structure helps to minimize it? Given the expectations by both internal and external parties in a more globalized and rapidly changing profession, SH&E professionals have the potential to experience both (Kahn, et al., 1964).

Role Conflict

According to Kahn, et al., different types of role conflict can be explored in the following scenarios:

Figure 1

Decentralized Reporting Structure



Considering the role of reporting relationships in terms of the level of stress experienced is a starting point in understanding whether one reporting structure is better than the other.

- *Intra-sender role conflict* involves incompatible expectations from an individual and his/her direct manager (whom may not be an SH&E professional).

- *Inter-sender role conflict* involves incompatible expectations from the safety professional's direct manager (e.g., an assembly line plant manager) and an additional organization with whom the safety professional has a dotted-lined relationship (e.g., SH&E department).

- *Person-role conflict* involves incompatibility between an individual's values and job expectations;

- *Inter-role conflict* involves incompatibility between job expectations and life expectations.

- *Role-overload* occurs when the safety role is expanded into environmental, security and sustain-

ability initiatives while an individual is expected to maintain the same level of safety performance.

Role Ambiguity

The role ambiguity frameworks developed by Kahn, et al. (1964), and Pearce (1981) also help frame this discussion. Kahn and colleagues describe two overarching types of role ambiguity, each with several dimensions: task ambiguity and socioemotional ambiguity. Type I (role ambiguity) includes three subtypes:

- 1) Scope of responsibilities refers to unclear expectations regarding job rights, duties and responsibilities.

- 2) Means-end knowledge refers to lack of certainty regarding how to fulfill one's role or how to best perform that role.

- 3) Priority of expectations refers to lack of clarity on which expectations have priority (Sakires, Doherty & Misner, 2009).

Scope of responsibilities can be ill-defined between SH&E professionals and senior management (ASSE, 2011). ASSE's Business of Safety Committee (BOSC; 2008a, b) conducted a study to determine gaps in perceptions of safety professionals and senior management. Researchers in-

terviewed managers who hire, manage or work with safety professionals. In a question regarding barriers to the effectiveness of the safety function, 64% of safety professionals agreed they were given clear directions and priorities, while 80% of managers agreed that safety professionals were given clear direction and priorities. The 16% difference indicates a gap in communication between management and safety professionals, and reflects a lack of clear direction, both of which are evidence of role ambiguity.

Consider other excerpts from the interviews:

- "Safety professionals are viewed as too technical and unable to look at issues from a big-picture perspective or to integrate programs into the organization."

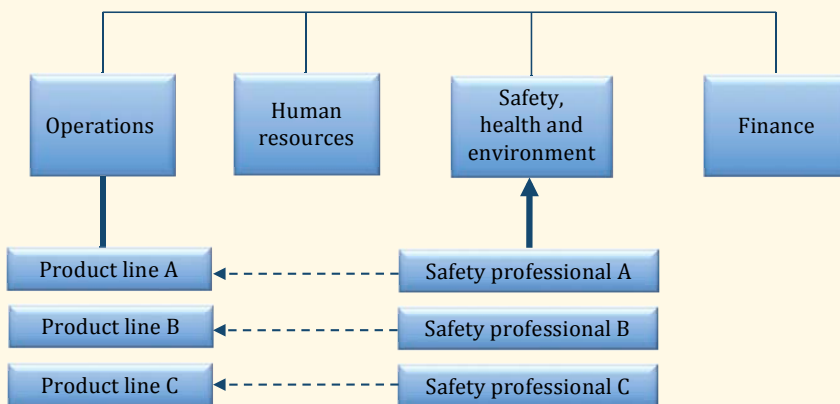
- "Senior managers also view safety professionals as lacking key adaptive-type technical skills such as evaluating the effectiveness of safety-related programs" (ASSE, 2008b).

Means-ends knowledge (not being able to determine how to fulfill one's role) can be described as the struggle to convince management about the costs of complying or exceeding regulations versus the costs of preventing a potential injury (spending money to prevent an injury that may or may not happen).

Priority of expectations can be experienced by a safety professional through a "firefighting" mentality in which priorities are established through risk assessment and strategic planning until a serious incident occurs and those priorities are sacrificed to deal with the crisis at hand.

Figure 2

Centralized Reporting Structure



Socioemotional ambiguity (Type II) has two dimensions: 1) ambiguity about evaluation of performance is the lack of clarity about how one is being evaluated; and 2) ambiguity about consequences of role performance: not knowing the consequences to oneself or the organization of either good or poor performance.

Both dimensions can be applied to the context of a safety professional. Performance evaluation is often uncertain in SH&E because it is difficult to measure the number of incidents prevented solely by an SH&E professional's efforts. It is much easier (although not preferred) to track the number of incidents that occur, than to track their continued reduction over time. Safety professionals do not own safety for their organization; their job is to advise, warn and counsel. However, safety professionals are often associated with the injury and illness rate experienced by the line operations within their scope of responsibilities.

Consequences of role performance can be equally uncertain, although safety professionals can use safety performance indicators (e.g., preventive acts that reduce the chance of injury) to track their proactive efforts, and OSHA (an external role sender) tracks lagging indicators of injury and illness rate. Since a safety professional does not directly own an organization's safety, it is uncertain how a poor incident rate will affect an individual's promotability.

Reporting Structure & Role Stress

A study of ASSE members examined the organizational and personal variables that could influence their role stress, specifically role conflict and role ambiguity. The participants surveyed experienced significantly less role conflict and role ambiguity in a centralized reporting structure.

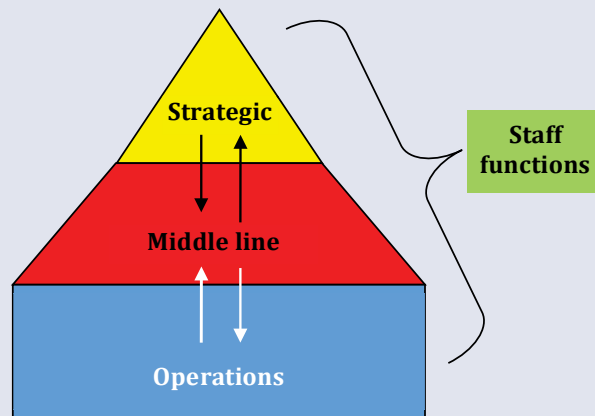
To determine an appropriate sample size, a pilot study was conducted and the results were used to conduct a power analysis for independent-sample t-tests. Using the software package PASS 11, a power level of .9, a ratio of 3 and an alpha level of .05 were input and yielded a required sample size of 356 cases. In this study, 3,200 ASSE members were asked to participate, and 442 returned surveys for a 14% response rate.

The Rizzo, House and Lirtzman (1970) role conflict and role ambiguity scales were used in this study. The reliability measures for the role conflict scale was .816; for role ambiguity it was .780. According to Rizzo, et al., "analyses of responses of managers show these two constructs to be factorially identifiable and independent" (p. 150). In addition, this tool is widely used in social sciences to assess role conflict and role ambiguity (Sakires, et al., 2009).

In terms of assessing whether experienced levels of role conflict and role ambiguity were statistically different according to reporting structure, a t-test was computed using SPSS 19.0 software.

Figure 3

Structural Organization



According to Mintzberg, staff functions have functional authority in contrast to formal authority. These boundary-spanning positions inherently deal with organizational uncertainties.

The variable reporting structure was operationalized through a single-item statement in which participants indicated whether they report by function or by product. To be grouped by function, a participant had to indicate that s/he was centralized or grouped with other safety professionals. To be grouped by product, the participant had to indicate that s/he was decentralized, grouped primarily with nonsafety professionals, supporting a particular product line.

Respondents from decentralized organizations had an average role conflict score of 36.92 ($SD = 7.92$), while respondents from centralized organizations had an average score of 34.55 ($SD = 8.41$). Results indicated a $p < .05$ indicating a statistically significant difference (Leech, Barrett & Morgan, 2011) in the average role conflict scores when comparing respondents from decentralized structures to respondents from centralized structures ($p = .004$). Similarly, role ambiguity levels were significantly higher ($p = .00$) for safety professionals in decentralized organizations (14.44, $SD = .70$) compared to those in centralized organizations (16.81, $SD = .62$).

Which Structure Do Safety Professionals Prefer?

The study instrument also included the following qualitative instruction: "List three aspects you would like to see changed about your job." Respondents listed 823 aspects (366 participants; 74 participants did not respond). Since multiple responses from the same respondent that belonged to the same category were counted only once, 657 aspects were deemed usable for analysis.

Responses were grouped into six overarching aspects. Of all aspects listed, 11% pertained to reporting structure. Others included level of authority/power (12%), processes/duties (26%), management support (29%), personal satisfaction with the position (16%) and amount of resources (7%).

Specific to reporting structure, examples of qualitative statements are:

- "I wish I had one boss—I have three, only one of whom performs my performance ratings each

year. I don't know whether he gets input from my other two bosses. Oh, and by the way, I report to the plant manager and to his boss, but the plant manager does my performance rating."

- "Centralized department w/one director."
- "Decentralized operation to better allocate resources to the operational assets."
- "We would be supervised by a person who does not have a human resources and/or health-care background."
- "To report directly to the CEO."
- "Report directly to the C-suite to get that leadership commitment."

This qualitative assessment did not present an overwhelming preference for either a centralized or a decentralized structure. However, SH&E professionals do think about this topic, as evidenced by it being listed as a job aspect they would like to see changed.

Qualitative statements made during the ASSE BOSC survey (2008b) also provide evidence of this fact. The results of that survey included a sample of direct quotes from ASSE members that reflected two viewpoints: 1) it is best to report to positions of power (e.g., operations manager, CEO); and 2) it is best to report as a function to HR or an SH&E department.

The following quotes from that survey illustrate those two themes:

- "It is the same regardless of reporting relationship, personalities and personal agendas. Granted, it is most desirable from a governance point of view to house SH&E in a staff department like human resources, legal or risk management rather than in a line department like operations" (p. 15).
- "Look for a program oversight office, not a legal office, and do your best to stay out of operations, maintenance, facilities, etc." (p. 14).
- "You may find that your best opportunities will not be in a functional department and you may need to look for a special staff member or report to the company executive vice president or CEO" (p. 13).
- "In my opinion, more progressive organizations have better programs. They have a safety professional who answers to a vice president (outside human resources) or a CEO (if the safety professional is on the CEO's board)" (p. 13).

Pros & Cons of Each Reporting Structure

Walker and Lorsch (1968; as cited by Shafritz, et al., 2005) explain that deciding whether to group activities by function or product is difficult, as each choice has advantages and limitations. Developing highly specialized functional units makes it difficult to coordinate or integrate with operations. Having product units as the basis for organization promotes collaboration between different functions (e.g., engineers, quality, supervisors), but the non-operation functions experience less identification with functional goals (Shafritz, et al., 2005).

It is plausible that grouping similar functions within the same functional unit would increase group cohesion or collegiality as they work together to deliver a service. Schachter (1959; as cited by

Beehr, 1976) uses an example of laboratory work to describe this concept. As Beehr explains it, Schachter suggests that people expecting an electric shock prefer to spend their waiting time with others like themselves (expecting shocks), indicating that peers in similarly stressful roles may be the most beneficial source of psychological support. In addition, Kahn and Quin (1970; as cited by Beehr, 1976) posit that group cohesiveness increases "psychological support" and may reduce job strain.

In a study of organizational-professional conflict and unmet expectations, Lait and Wallace (2002) note that coworkers become supportive of each other in the joint aspiration to help their clients (Leiter, 1991). They explain how collegial relations, such as teamwork and sharing work-related knowledge, help workers cope with stressful roles. Although a function-based group (e.g., SH&E department) can be viewed as cohesive and collegial, groups structured by product could be cohesive as well.

Regardless of reporting structure, it is conceivable that in times of economic strain competition among similarly grouped roles may become survivalist and competition between product lines can be equally stressful (e.g., downsizing functions that support cancelled product lines). These stressful conditions can produce role conflict and role ambiguity. For example, a safety professional may take on a multitude of expectations to ensure that s/he is adding value to the organization, which could lead to role conflict. In addition, the uncertain future of the product line one supports could generate role ambiguity.

Besides the collegiality of being grouped with other safety professionals, Hax and Majluf (1981) suggest that centralization (by function) provides opportunity for career advancement. Clearly, a department organized by function has an upper hierarchical position to which members of that functional group could aspire. In a decentralized structure, an SH&E professional who reports to a line manager might need to take on a completely different role (e.g., engineer) to advance within the organization.

A centralized SH&E group is considered a center of excellence in the organization and as a unit can enact change in an organization. For example, a large group of safety professionals aligned under one manager may be able to push for change more easily than a single safety professional pushing for change in a decentralized scenario.

However, Hax and Majluf (1981) also note several distinct and noteworthy disadvantages to the centralized structure. For example, the specialization of the functional unit pushes the decision-making process to the top, because only at the top is the convergence of the other centralized units and/or inputs required for a final decision. A decentralized safety professional may enjoy more autonomy.

Decentralized organizations by nature require that decisions be made at a middle management level and preclude upper management involvement if it is not necessary. In addition, a safety professional in a company organized by product has field ex-

perience in solving multiple managerial problems as s/he experiences the daily manufacturing struggles. Although a centralized SH&E group is considered a center of excellence, the decentralized safety professional may have just as much respect (or perhaps more) from peers because s/he is not viewed as part of an outside group enforcing rules and mandated programs. In addition, field/floor safety personnel will likely not be deemed out of touch with the realities of day-to-day business operations.

Further, Hax and Majluf (1981) discuss how each type of organization resolves conflicts. When specialists in the centralized unit have a dispute, the SH&E manager is the final decision maker, as s/he is accountable for the group's performance. Conversely, in a decentralized unit, middle managers are accountable for the performance of their business or product line. Therefore, they strive to resolve conflicts at a lower level to avoid any perception that the unit is not a smoothly running operation. Hax and Majluf suggest that a decentralized unit "creates a genuine business climate" whereas the centralized unit promotes more technical excellence than business prominence.

Management Strategies

Although it is interesting that decentralized structures seem to negatively influence the level of role stress, the midlevel safety professional may have little control over it. However, this information could be used by those in executive positions who influence restructuring strategies. While most safety professionals operate within the confines of the reporting structure as dictated by their organizations, SH&E professionals can use their knowledge of the pros and cons of each structure to craft strategies that may help reduce role stress regardless of the structure.

Centralized Structure

The manager of a centralized SH&E unit may employ a participative leadership style, using vision and strategy to organize staff to not only be experts in their fields but also to give them enough autonomy to be change agents and add value to the divisions they support. This manager may encourage staff input in decision making, yet holds the power to make ultimate strategic decisions for the team.

One disadvantage of this reporting relationship is that the department may seem too narrowly focused or out of touch with operational reality. Customers need to perceive the SH&E team as subject-matter experts who are forward thinking and add value to the group and division with which they interact, not view them as safety cops. Thus, the manager must give his/her staff opportunities to interact with operations in areas other than safety. The manager of a centralized safety group should consider the following strategies:

- Expand the group's core competencies through career-expanding rotations on the floor or in the field in order to expose safety staff to actual working conditions. Respect/power is gained from below (the operating core), not from a position on an organiza-

tional chart. In examining a universal model of safety excellence, Hansen (2007) reinforces that statement with this quote from Dow Chemical: "Managers have power of position (granted from above), while leaders have power of influence (earned from below), and what often defines the difference in performance between excellent companies and all the rest is how [power] is used" (p. 53).

- Direct, on-the-floor/in-the-field working exposure also levels the playing field. If a safety professional can build and dismantle a product just like a supervisor, engineer or assembler, s/he will get workers' attention. This helps safety staff become viewed as part of the team and a legitimate help (not a hindrance) to operations. It is also beneficial to invite operations personnel to temporarily rotate into the SH&E group.

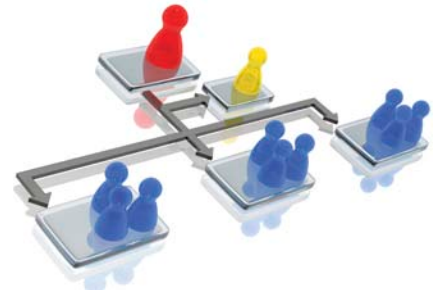
- Invest in career development beyond the typical safety and environmental seminars and conferences. For example, in the author's experience, having 80 hours of AutoCAD training within the first month on the job right out of college was extremely beneficial. Suddenly, I could speak intelligently with engineers regarding virtual design and tolerances, and I understood how difficult my future requests would be to change if not implemented during the conceptual stage. Opportunities such as additional training on reading blueprints, electrical diagrams and mechanical failures help SH&E professional gain entry into safety-worthy conversations. It also exposes safety personnel to other lines of work.

- Be open and honest about expectations for group growth and change, especially in terms of succession planning. For example, if a manager is nearing retirement, staff is likely wondering who will be the new boss. Instead of allowing staff members to speculate, which can create an antagonistic or competitive environment, share the plans.

- Conduct regular customer surveys with plant or division managers served by safety staff. Although some feedback may be negative, inform safety staff that the information will not be used to assess performance; rather, it should be viewed as a learning experience for the whole group so that it can become a stronger unit.

Decentralized Structure

Safety professionals working in a decentralized structure all have different divisional managers. In some cases, they report to a divisional manager of a product line, but have a dotted-line relationship to the corporate SH&E group. As noted, safety professionals working in this type of reporting structure tend to experience more role stress, potentially because stress can be relieved when grouped with



While most safety professionals operate within the confines of the reporting structure dictated by their organizations, SH&E professionals can use their knowledge of the pros and cons of each structure to craft strategies that may help reduce role stress.

similar functions. Thus, the following suggestions are framed around reaching out to similar functions:

- Educate the division manager about the importance of participating in benchmarking experiences with other company divisions. Beyond benchmarking, exchange best practices regularly, share safety alerts, conduct cross-divisional audits and communicate lessons learned. These actions help SH&E professionals network with other safety professionals within the organization.

- Ensure that the division manager understands the importance of continuing education, not only to sharpen SH&E competencies but also to expand managerial skills (e.g., managing a safety intern or summer employee).

- Take steps to clarify roles since ambiguity may arise when the direct manager is not a safety professional. If there is no dotted-line reporting to a corporate SH&E department, start with a self-assessment of the division's upper management team. Using an assessment tool such as the OSHA program evaluation profile (www.osha.gov/dsg/topics/safetyhealth/pep.html) can help clarify where the division stands, where it needs to be and how the SH&E professional can help get it there. Such an assessment tool can help clarify job tasks and expectations as well as create a strategy for the division.

- In situations where the SH&E professional reports to a product's divisional manager, yet a corporate SH&E group exists on site, conduct an exploratory interview. Meet with the director of the SH&E group and explore the duties of that job. If interested, work with management to develop a career development plan that targets the position.

- To interact with more people in similar positions, attend local ASSE chapter meetings. This is an effective way to network within the professional safety community, share experiences and learn. (A list of chapter locations can be found at www.asse.org/membership/findachapter.php.)

Conclusion

Role conflict and role ambiguity are inherent in the safety professional role by virtue of its boundary-spanning nature. A centralized reporting structure can minimize these role stressors, which are typically higher in decentralized settings. Restructuring teams can use this information when determining where SH&E professionals fit best in an organizational structure.

It should be noted, however, this information addresses role stressors only. Although it is theorized that increased levels of role conflict and role ambiguity can negatively affect role effectiveness, this hypothesis has not been empirically tested.

At this point, safety professionals are inconclusive about which reporting structure they prefer. Ideally, studies that examine the safety performance of organizations dependent on reporting structure could help close this literature gap. **PS**

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