

**SATURN +5 ISO 14000 PILOT PROJECT GROUP  
MEMBER ORGANIZATION QUESTIONNAIRE SUMMARIES**

**Highlights from Member Firm Interviews and Questionnaire Summaries**

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**Introduction**

Saturn Corporation and five of its Tennessee based suppliers (ACD Tridon, Bridgestone/Firestone, Inc., Calsonic Yorozu Corporation, Federal-Mogul Corporation, and Wheland Foundry) are conducting an ISO 14000 pilot project in conjunction with the Tennessee Department of Environment and Conservation. One purpose for the project is to document experiences of these six companies as they go through the ISO 14000 process. It is hoped that the experiences and work product of the pilot group will eventually benefit other Tennessee companies considering whether to seek certification under the ISO 14000 standards.

Each company involved in the pilot project has different methods for managing their respective environmental issues and concerns. Perceptions of and concerns about ISO 14000 and reasons for participation in the pilot project also vary from firm to firm. In an attempt to benefit and learn from

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these differences, the group decided to gain a better understanding of the current status of each member organization's environmental management system. This analysis was to include, among other things, each member's perceptions regarding the value to their respective company of attempting to achieve compliance with and obtain certification under the ISO 14000 standards.

To facilitate this exercise, a Member Organization Questionnaire was drafted for review by the group. Following discussion and revision, the group approved the form of the questionnaire. The finalized questionnaire served as the basis for interviews of the primary environmental managers for each member organization's Tennessee-based operations. Summary responses to the questionnaire based upon these initial interviews were drafted for and reviewed by each member. Revisions and supplements to the draft responses were made based upon numerous follow up telephone interviews. A compilation of the completed questionnaire summary responses for all members was distributed to the entire group simultaneously with the distribution of the first draft of this document.

The summary responses to the questionnaire are intended for use by the member organizations as a tool to uncover, compare, and contrast each member's perceptions of and approaches to environmental management systems and ISO 14000 certification. This document is intended to assist such comparisons by highlighting various similarities and differences and to provide other general observations regarding the responses.

### **Current EMS**

Despite an obviously shared interest in ISO 14000 reflected by participation in the pilot project, no two member firms necessarily share the same views or philosophy regarding managing environmental issues and concerns within the firm. To better understand each company's "baseline" as each contemplates modifying, restructuring, or even replacing existing environmental management systems through pursuit of ISO 14000 certification, the questionnaire asked each company to state whether it presently had "what it considers" a "formal" EMS in place. For Federal-Mogul, this

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question was posed after ISO 14000 certification for its Sparta plant had already been obtained (and the answer, clearly, was “yes”). With respect to the other five members, however, the responses reflect divergent perspectives by each company of the degree of “formality” of its current EMS.

Of the five companies not yet fully certified under ISO 14000, three responded that they already have in place what they consider a “formal” EMS. Bridgestone/Firestone describes its EMS as “at least a very adequate [system] that keeps its plants and facilities fully compliant” with environmental regulatory requirements. However, the company asserts that this formal EMS is lacking in its integration with overall core company management. Bridgestone/Firestone expresses its view that the process of obtaining ISO 14000 certification for each of its manufacturing facilities and tire plants should assist in remedying this perceived lack of integration. (To date, four out of Bridgestone/Firestone’s nearly 40 such manufacturing plants and facilities have obtained or been approved for ISO 14000 certification.)

Calsonic Yorozu also states that it has a formal EMS in place. This system consists of a series of approximately 15 major written procedures implemented as part of the company’s QS 9000 quality management system. However, environmental managers at Calsonic Yorozu believe that a critical question for the firm’s evaluation during the pilot project is whether a “stand-alone” EMS such as that implemented through the ISO 14000 certification process would better serve the company’s needs.

Wheland Foundry is also QS 9000 certified, but has invested significant effort and resources in developing a separate written Environmental Policy and Procedures Notebook, which contains its formal EMS. Of all the member organizations which have not yet obtained ISO 14000 certification, Wheland Foundry appears to have developed the most detailed and “formal” EMS.

Only two companies stated that they did not have in place a “formal” EMS. Although ACD Tridon is QS 9000 certified and has in place “certain written procedures for handling environmental issues,” it does not consider this to be a “formal” EMS. This is due, in part, to the fact that there “is no single notebook or other compilation” of these written environmental procedures available. Saturn also states that it currently operates under what it considers an “informal” EMS, despite

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fully maintaining compliance with environmental laws and regulations and being more than 60 percent in compliance with ISO 14000 as demonstrated by its most recent gap analysis.

### **Upper Management Support for EMS (and ISO 14000)**

Perhaps not surprisingly, the three companies with perhaps the most detailed and “formalized” EMS of the member organizations also appear to receive the strongest support for EMS by upper management and/or ownership of their respective firms. As noted, Federal-Mogul’s Sparta plant has already obtained ISO 14000 certification and was among the earliest of Tennessee companies to do so. Federal-Mogul describes upper management at Sparta as “very committed to EMS and environmental issues.” Significantly, the background of key upper managers at Sparta includes former plant-wide environmental management responsibilities.

Bridgestone/Firestone has already had 4 of its nearly 40 plants either receive or be approved for ISO 14000 certification. All of the company’s remaining plants are scheduled to achieve certification before the end of this year. This pace is almost certainly a by-product of the support for ISO 14000 certification demonstrated by Bridgestone/Firestone’s CEO. Indeed, the CEO is noted as having been the first at Bridgestone/Firestone to raise the issue of requiring such certification of the company’s manufacturing facilities and tire plants.

Although Wheland Foundry has not yet decided whether to obtain ISO 14000 certification or only maintain substantial compliance with the standard, the company has an extensive, formal EMS already in place reflecting an investment of significant man-hours and resources by the firm. Wheland Foundry describes its top level management and ownership as “plac[ing] a very high level of value on EMS and environmental issues.” The firm’s emphasis on extensive and proactive management of environmental issues is further attributed to the fact that Wheland is owned by an individual with deep roots in the local community who recognizes the importance of environmental issues to that community.

## **Motivations for Pursuing Formalized EMS and/or ISO 14000 Certification**

Each member organization brings to the table individualized motivations for pursuing ISO 14000 certification, although many are similar and overlapping. However, some specific motivations expressed during interviews were unique to a particular company.

ACD Tridon stated its view that additional business may result from achieving ISO 14000 certification, similar to the company's experience with being the first company in its area to obtain QS 9000 certification. As do most group members, ACD Tridon also believes that ISO 14000 certification will eventually become a requirement for doing business with major automobile manufacturers in the United States.

Similarly, a primary motivation for Bridgestone/Firestone to obtain ISO 14000 certification for its facilities and plants is the perception that "the company's market will eventually . . . demand[] such certification as a condition of doing business in the market." However, the company also expresses internally-based motivations for pursuing such certifications. For example, Bridgestone/Firestone believes that improvements to its EMS resulting from ISO 14000 certification will result in a better managed company which will have a further end result of production of better products. Similarly, the company feels that ISO 14000 certification signifies the value a company places on "excellence in management," thus assisting the firm in attracting and retaining outstanding managers and other environmental personnel.

Calsonic Yorozu also views ISO 14000 certification as a customer satisfaction issue, stating that it will most likely pursue certification if it appears that is the desire of its primary customer base. However, another potential benefit foreseen by Calsonic Yorozu from ISO 14000 is implementation of a system that avoids delays in the handling of day-to-day environmental concerns. Under the company's current system, such delays can occasionally occur because the primary environmental manager must often devote significant time to non-environmental responsibilities. Calsonic Yorozu believes that the processes established under an ISO 14000 compliant system should not be affected by the constraints of any one individual manager's non-environmental responsibilities.

A strong inducement for Federal-Mogul to obtain ISO 14000 certification was the opportunity

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to be on the leading edge in Tennessee of industry trends toward customer requirements that their suppliers have such certification. However, Federal-Mogul was also motivated by the opportunity it believes ISO 14000 certification provides to solidify its already good environmental reputation with the local community.

The primary motivation expressed by Saturn for obtaining certification is the opportunity to more completely integrate environmental management into its core business and to ensure upper management awareness of environmental issues in business planning and strategy. However, Saturn states that another benefit to obtaining ISO 14000 certification is elimination of concerns that the standard will eventually become a de facto trade barrier to selling products abroad.

Uniquely, Wheland Foundry relies upon the strength of its current EMS to withhold judgment on whether to obtain ISO 14000 certification. Wheland perceives the benefit of being substantially in compliance with the ISO 14000 standards but does not yet see high utility in obtaining formal ISO 14000 certification. The critical question in Wheland's view is "what would we gain from being ISO 14000 certified" that would not otherwise be obtained simply by being (1) in substantial compliance with ISO 14000, and (2) a good environmental neighbor.

### **ISO 14000 Concerns**

Most member organizations also expressed strong concerns about either the process of becoming ISO 14000 certified or obtaining the certification itself. Primarily different concerns were expressed by each company. (Only ACD Tridon stated that it had no concerns about becoming certified, based upon its experience with obtaining QS 9000 certification.)

A major concern for Bridgestone/Firestone is the fact that the ISO is already working on revising the ISO 14000 standards before most companies in the United States have had the opportunity to obtain certification. At present, little is known about how potential revisions may affect the current standards, including whether significant time and resources invested in meeting current standards might end up being wasted if such standards are eventually substantially changed.

A concern expressed by Calsonic Yorozu involves the perceived burden and expense antici-

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pated as necessary to create and maintain the extensive documentation required for certification. Calsonic Yorozu is also concerned that creating and maintaining such documentation might impose significant liabilities or responsibilities upon the firm that would not exist otherwise.

Although it has already obtained ISO 14000 certification, an initial concern of Federal-Mogul's Sparta plant was the cost of both the initial certification effort and subsequent efforts to maintain certification. According to Federal-Mogul, however, neither has turned out to be as severe as initially feared. Another initial misgiving of Federal-Mogul was whether problems found during internal audits would be required to be disclosed to its ISO 14000 registrar. The company eventually decided that anything discovered during internal audits would not necessarily have to be so disclosed.

Saturn's primary concern regarding obtaining ISO 14000 certification is the possible impact of that initiative upon its current effort to become the first automobile manufacturing plant to obtain QS 9000 certification. Saturn's QS 9000 certification initiative has required investment of significant labor-hours and other company resources. Indeed, more than 200 employees have been working on Saturn's QS 9000 initiative.

To avoid any adverse impact, Saturn intends to delay making a concerted push to complete compliance and obtain ISO 14000 certification until such time as the QS 9000 initiative is completed. Another concern expressed by Saturn involves the level of training required under ISO 14000. Saturn employs nearly 2,000 people suggesting that necessary training efforts may impose large costs and difficult logistical problems.

Wheland Foundry expresses similar concerns regarding ISO 14000 training requirements. Wheland has a large, unionized workforce that is not highly educated. The training level required by ISO 14000 standards would impose difficulties in terms of logistics (perhaps as many as 9000 employees training at any one time) and effectiveness (having to address varying degrees of education among employees). Such training would also be expensive in terms of overall labor-hours involved.

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### **ISO 14000 Tangible Benefits**

As emphasized above, most member organizations are still in early or mid-level stages in the process of achieving compliance with and/or certification under the ISO 14000 standards. Only Federal-Mogul's Sparta plant has essentially completed the process and become fully certified. Approximately 10 percent of Bridgestone/Firestone's manufacturing facilities and tire plants are either approved for or have received certification. Wheland Foundry and Saturn were each located in the 60-70 percent range for compliance with the ISO 14000 standards at their most recent respective gap analyses. ACD Tridon and Calsonic Yorozu have not yet determined whether or when to begin formal efforts to obtain ISO 14000 compliance or certification.

Given the beginning nature of many of the member firms' experiences with ISO 14000, a complete picture of tangible benefits to be gained from certification under the standard cannot yet be developed. Nonetheless, and even in these early stages, member organizations have already attributed a number of tangible benefits to pursuit of ISO 14000 certification. A brief description of the benefits so identified in the questionnaires follows.

Bridgestone/Firestone's early experiences suggest that pursuit of ISO 14000 certification is raising the overall environmental awareness of the company, including at the plant and facility level. Implementation of an ISO 14000 compliant EMS forces non-environmental management and personnel to perform in and evaluate environmental roles. At Bridgestone/Firestone, plant presidents have been required, some for the first time, to deal with environmental issues. This has included focusing on the performance of individual managers responsible for handling environmental issues at their plants. This focus has caused plant presidents to replace individuals deemed to be performing these duties unsatisfactorily. Three such plant environmental managers have been replaced in Bridgestone/Firestone facilities pursuing ISO 14000 certification.

The early experiences of Federal-Mogul indicate that ISO 14000 certification can have a positive environmental impact by contributing to pollution prevention. Federal-Mogul reports that, due to the increased focus on waste minimization and recycling programs brought about by ISO 14000, it's Sparta plant has increased certain recycling and increased certain reuse of hazardous materials

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prior to disposal. In addition to positively impacting the environment, these recycling and waste minimization increases have brought about cost savings as landfill costs, waste hauling charges, and waste disposal costs have been reduced.

Wheland Foundry considers that continually improving its EMS in attempting to achieve compliance with ISO 14000 standards has assisted the firm in obtaining a significant competitive advantage over its industry competitors. Wheland observes that its environmental programs are more organized and advanced than any of its competitors which allows its environmental costs to be significantly lower than the industry average. Wheland's advanced EMS has also assisted the firm in meeting one of the biggest environmental challenges facing its industry – dealing with solid waste disposal. Wheland reports a current 20-year or greater capacity to handle all of its solid waste disposal needs at all of its facilities. Further, Wheland's efforts in this area have the company already prepared to meet regulatory technology standards scheduled to take effect in 2003, although it is expected that most of its industry will experience difficulty in meeting those standards by that time.

### **“Perfect World” Issues**

Perhaps the most entertaining and informative of the questionnaire responses involve the “Perfect World” Issues section. Here, the environmental managers for each company were given the opportunity to describe what type of changes they might make if they could “wave a magic wand” over how their firms were operated. The responses to these questions reveal some degree of dissatisfaction with certain aspects of current environmental management systems. Perhaps more importantly, however, they also reveal hopes for how undergoing the ISO 14000 certification process may provide improvements in such areas of concern.

A common “perfect world” refrain among member organizations was a desire to eliminate artificial time constraints for handling environmental issues caused by failure to incorporate environmental concerns or thought-processes early in the decision-making process. ACD Tridon, Bridgestone/Firestone, and Wheland Foundry each specifically mentioned this issue. This com-

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plaint is, of course, related to the universal desire among the pilot group members for greater integration of environmental management into core firm business planning and decision-making. Interestingly, the questionnaire responses of Bridgestone/Firestone and Wheland Foundry demonstrate an informative “before and after” picture of contrasting decision-making models in this regard.

Wheland Foundry’s environmental managers describe a fairly recent corporate decision concerning where to locate a new foundry (eventually located in Warrenton, Georgia). The site selection decision was made “without any input by or consultation with the Environmental Department.” The apparent view of upper management was that the environmental department would be able to handle whatever environmental issues arose regardless of the actual site selection decision made. The environmental managers, however, argue that a better, more “team-oriented approach” would involve the environmental department in the location decision during the planning stage so that problems could be anticipated and alternatives explored and considered. This is preferable to a “crisis-management” approach to environmental issues that requires environmental managers to “fix” whatever problems arise after the fact in situations where sufficient time to adequately act and respond may no longer be available.

In contrast, Bridgestone/Firestone’s questionnaire response describes a similar situation but where environmental management actually participated as part of the initial decision making process. For construction of a new tire plant (eventually located in Aiken, South Carolina), environmental management was originally part of the site selection team and later part of the construction management team. Bridgestone/Firestone’s environmental managers report that necessary permits were obtained “in record time.” Other environmental issues were handled smoothly. Environmental managers always had plenty of advance notice to handle issues as they arose. According to Bridgestone/Firestone’s environmental managers, participation of environmental management in the initial decision-making processes was a key element in the ease with which environmental issues were successfully addressed and handled on this project.

The questionnaire responses reflect that the eventual goal of the environmental managers of the pilot group firms is to replace the former scenario with the latter in as many situations as possible.

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(For example, Wheland Foundry reports “very real progress” in this area as its Environmental Manager recently has been made responsible for supervising the 10-year growth plan at the foundry.) Although none of the member firms (with perhaps the sole exception being Federal-Mogul in Sparta which has already obtained ISO 14000 certification) believe that they are fully there yet, the interviews underlying the questionnaire responses suggest that most believe that their respective companies are heading in that direction. At least among the pilot group firms, the interviews also suggest that a consensus exists that the process of seeking compliance with the ISO 14000 standards has increased the focus of each company on these concerns.

**END**