Environmental protection has become a prevalent idea in China since we stepped into the twenty-first century. People have turned their environmental eyes onto places where they have more daily interactions—where they live and where they work. The concept of “Green” is integrated in many buildings and projects starting from the design. And the final product’s operation and utilization exhibits excellence on water conservation, energy efficiency, and low carbon emission. But behind those “Green Stars,” are their construction processes as efficient in water usage, energy consumption, and carbon emission as what they have been seen? Or at least, in compliance with all the environmental laws and regulations?

Smaller projects usually take up smaller places and are completed in a relatively short time. Environmental problems during such projects’ construction may not be very severe or can be managed easily. However, key mega projects, are usually massive with a relatively long time to complete. If there is no scientific and systematic management introduced, or just simply copy and paste what is used on smaller projects, safety and environment management will take double or more the efforts than needed but still fail to deliver a satisfactory management result, let alone facing the risk of damaging the environment.

This book has interpreted environmental problems that emerge in key mega construction projects from the perspective of environmental management integrated with construction management. The author(s) have participated in many key mega construction projects. They have put together their experience, international practices together with the real situation in China to help elaborate on management system, team organization, managerial methods and techniques. Therefore, what is in the book and the figures and diagrams can be used as direct reference for other key mega projects. Meanwhile, China’s construction companies, including construction supervision companies, environmental supervision companies, construction management companies or even overseas ones, and owner companies can draw complete information about environmental management from this book. Project executives, middle management and/or construction workers can also benefit from it. This book has set up a new standard for environmental management in key mega
construction projects, and with the hope to bring different participants in con-
struction to a more compliant and efficient environmental management system.

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My second child was born the same time when the book was completed. I would
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