

Expression of Interest for

Asset Management Training



Submitted to
CNAM Board



Submitted by



June 13, 2016

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Company Overview and History

CH2M HILL Canada Limited (CH2M) has provided consulting engineering services in Canada since the 1920s. With nearly 1,400 staff in Canada and approximately 25,000 globally, we offer clients a complete range of engineering services across Canada and globally. We have 80 offices in North America and a network of offices in Canada, including Vancouver, Kamloops, Calgary, Winnipeg, Waterloo, Ottawa, and Toronto.

CH2M's experts in infrastructure asset management (AM) work with municipalities to determine their needs and objectives. Our proven approaches and methods have successfully helped clients reduce costs and risks and improve service delivery, by focusing on areas like ISO 55000 and PAS 55 implementation, better defining capital projects, and adopting a lifecycle approach to decision making.

CH2M has been an active member of CNAM since the organization's founding stages. Gareth Lifton was a member of the CNAM Board in previous years, and Iain Cranston is currently a member of the CNAM Board and is actively involved through his role as Co-Founder and Chair of CNAM's New Professionals Network (NPN). CH2M continues to support the growth of CNAM and we believe this training directory is a valuable asset to CNAM members. Furthermore, the CH2M AM Training team is headquartered locally in Canada.

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Infrastructure Asset Management Training

As leaders in the infrastructure AM field, CH2M has chosen to share our expertise directly with other AM professionals through a number of training initiatives:

- 3 Day Training Course, including an Institute of Asset Management (IAM) Certificate Exam
- Custom Training Courses

The CH2M team is open to discussions with the CNAM review committee on how this variety of training can be expressed on CNAM's Training Listing.

General Information for all Training initiatives

Intended Audience: CH2M's intended audience includes CNAM Members and AM staff from all backgrounds including engineers, finance, planners, operations, etc.

Class Sizes: Any size of group is welcome—individuals can join a 3-day course happening somewhere across Canada, and each of our initiatives is scalable for organization of any size – we have experience working with individual teams / departments or full organizations. Our 3-day course is designed for up to 25 people.

Staff Pre-qualifications: No pre-qualifications are required to attend CH2M sessions. The 3 day course and exam targets people with some AM experience; however, people new to AM have attended and successfully completed this course and the certification exam.

Organization AM Maturity: These initiatives address all stages of AM development and benefit those at early stages, and those moving toward full ISO 55000 alignment and certification.

Method of Training: All training options are designed to be face-to-face sessions.

Locations: Each training option outlined in this course is available across Canada and around the world, providing there is sufficient demand in the region.

Terms and Conditions: CH2M Terms and Condition apply to any candidate and/or organization looking to participate in our training services, including non-distribution of copyrighted materials.

Pricing

Course	Pricing	
3 Day Training Course incl IAM Certificate Exam	\$1,950 CAD per person, plus local taxes	CNAM Members are eligible for a \$50 discount per person*
Custom Training Courses -CH2M Delivered	Price available on request. This includes CH2M consultants delivering the courses.	
Custom Training Courses -Self Delivered	Price available on request. This includes online training modules and/or a 'train the trainer' program to build a pool of internal trainers.	

***Discount information for CNAM:** As mentioned, our 3 day course will be discounted by \$50 per person for CNAM Members.

3 Day Infrastructure Asset Management & IAM Certificate Course

CH2M developed a 3-day infrastructure AM training and certificate course that aligns with the IAM Professional Certificate Exam. The course was developed based on feedback from CNAM members and clients, struggling to find appropriate educational and certificate opportunities in AM across North America.

Training Framework Our 3-day infrastructure AM training and certificate course is aligned with the IAM Professional Certificate Exam. The course is split into the following five modules that align with good practice AM as outlined in ISO 55000, PAS 55, and the IAM's learning framework:

- Module 1: Introduction to Asset Management
- Module 2: Asset Related Risk
- Module 3: Asset Management Lifecycle
- Module 4: Asset Information
- Module 5: Financial and Business Impacts (including Asset Management Plans)

The course has been designed and refined to include the application of adult learning techniques – employing a mix of presentation and theory, real world stories, and working exercises. Course attendees applying their newly acquired AM techniques to the “MoneyPit Manor,” a fictional apartment building that is facing a number of infrastructure and service delivery challenges that infrastructure owners and asset managers would typically face, with the working exercises based on real data.

IAM Certificate Exam On the third day of the course, attendees can take the IAM Certificate Examination. The Certificate is a globally recognized AM professional qualification, developed and managed by the IAM. CH2M serves as a proxy between exam candidates and the IAM. The exam is multiple choice, closed book, and takes 2 hours. More information on the exam is available at the following website:
<https://theiam.org/products-and-services/iam-qualifications/Certificate-1-July-2015>

Training Delivery Each 3-day course accommodates 25 people. Courses are delivered in-person, in a classroom-style setting. CH2M brings the course directly to any organization; we have delivered courses to clients across Canada and around the world.

CH2M's training framework and delivery can be customized to suit specific organizations and their AM maturity level. For these customized courses, CH2M looks for at least 15 attendees.

Upon successfully completing the training course, attendees will receive a framed CH2M Course Certificate, and following a successful pass in the exam, the attendee will receive their IAM AM Certificate in the mail directly from the IAM.

Latest Course Schedule For information on the latest course schedule, please visit www.ch2m.com/AMTraining. Courses take place around the world, and more dates and venues are added

regularly. Contact the CH2M AM Training Team by emailing AMTraining@ch2m.com to submit your interest for a new location, and we will contact you when courses are available in your region.

References

"I have taken number of Asset Management-related training courses over the years and the training delivered by CH2M was by far the most comprehensive. I would highly recommend this to anyone involved in Asset Management whether it be a senior manager, project manager or technical staff." Imran Motala, Manager of Water and Wastewater Planning, Region of Peel, CNAM Member, Imran.Motala@peelregion.ca

"I would like to recommend the IAM Asset Management Certificate course to anyone who wants to get a comprehensive view of the field of asset management, especially in relationship to ISO 55000 standards." Johan Krijnen, Manager AM, City of Cambridge, CNAM Member, KrijnenJ@cambridge.ca

Awards

CH2M is recognized by the IAM as an Endorsed Trainer for the 3 day course. This involved a rigorous review of the training materials by AM experts at the IAM. **CH2M is currently the only IAM Endorsed Trainer running a multi-day certificate course based out of North America, and the only engineering consulting firm with such a course.**



CH2M was awarded 3rd place in the CNAM Tereo Awards at the 2016 CNAM Conference in Halifax, Nova Scotia.

Customized Training Courses

CH2M works with organizations to build custom, in house training, allowing them to be self-sufficient in their AM training program. This includes developing custom training materials, running a test course, and training a pool of in house trainers who can deliver the training themselves. These course can range from a few hours to multi day sessions and can be tailored to link directly to the organization's AM tools and processes, to train staff on theory of AM, as well as how to specifically apply it in their daily roles. A pool of in house trainers that can be developed through a 'train the trainer' program.

Pricing & Schedule: Contact CH2M's team to more specific pricing and schedules for your organization.

References

References are available upon request from:

- Ron Amann, Corporate Asset Mgmt, City of Winnipeg, CNAM Member, Ramann@winnipeg.ca
- Lorin McConnell, Corporate Asset Mgmt, City of Calgary, CNAM Member, Lorin.McConnell@calgary.ca

Qualifications

Asset Management Knowledge

CH2M offers skilled, experienced AM consultants supporting clients around the world, including North America, Europe, the Middle East, and Asia Pacific. We provide a full spectrum of AM services to support clients at the various stages of in their AM journey.

- AM Policy & Strategy
- AM Plans
- AM Gap Assessments and Improvement Planning
- ISO 5500X and PAS 55 services
- Capital Investment Planning and Prioritization
- Level of Service Frameworks
- Risk Management
- Maintenance Planning including Reliability RCM2 & RCM3
- Operations and Maintenance Optimization
- Governance, Accountability and Org Design
- Staff Competency Frameworks and Training Plans
- IAM Endorsed Training & Certificate courses plus custom tailored Training Courses

Contributing Members of Industry



CH2M are members of the Canadian Technical Committee for ISO 55000.



CH2M were members of the Review Panel for PAS 55.



CH2M are active members of the CNAM community.



CH2M are involved in the IAM Canada and US Chapters.

Training Team

Global Practice Lead for Strategic AM and Vice President – Gareth Lifton. Gareth is a senior manager whose experience has primarily been focused on the development and management of long-term capital programs, asset strategies and business plans, including implementing AM/risk management methodologies, tools, and techniques. He has over 25 years of experience. Gareth is currently the lead AM consultant for the many Canadian municipal clients and is assisting these clients with the development and implementation of their Comprehensive AM. Gareth is also the senior sponsor for CH2M's Global AM Training program.

Senior Asset Manager Consultant & Training Designer – Paul Smeaton. Paul is a Senior Management Consultant. Before joining CH2M, he gained over 20 years' experience in the UK water industry. His initial background was in the design and construction of major water supply schemes before he led the development of AM tools and techniques across Scottish Water, specializing in asset risk management and capital investment prioritization. He successfully led a number of AM business change projects that resulted in increased levels of service to the customer, whilst at the same time significantly reducing costs. He is also responsible for developing the material and delivering CH2M's AM Training program that aligns with the IAM Certificate in AM.

Senior Asset Manager Consultant & Training Designer – Andy Whittaker. Andy is a senior AM consultant. His experience includes establishing AM teams and processes, and creating asset strategies and investment plans for a range of water and rail companies. He has considerable expertise in asset risk management and risk-based investment planning. His solid grounding in analytical techniques is complemented by his strong facilitation and communication skills. He is responsible for developing the material and delivering CH2M's AM Training program that aligns with the IAM Certificate in AM.

Global Asset Manager Training Program Manager – Iain Cranston. Iain is an AM Consultant who has helped municipal organizations across Canada on the various pillars of AM; ranging from AM plans to level of service frameworks and capital investment prioritization. Iain co-founded CNAM's New Professional Network (NPN). As co-chair of the NPN, he actively supports and introduces more young professionals to the field of AM. Iain also coordinated the development of CH2M's AM Training program.