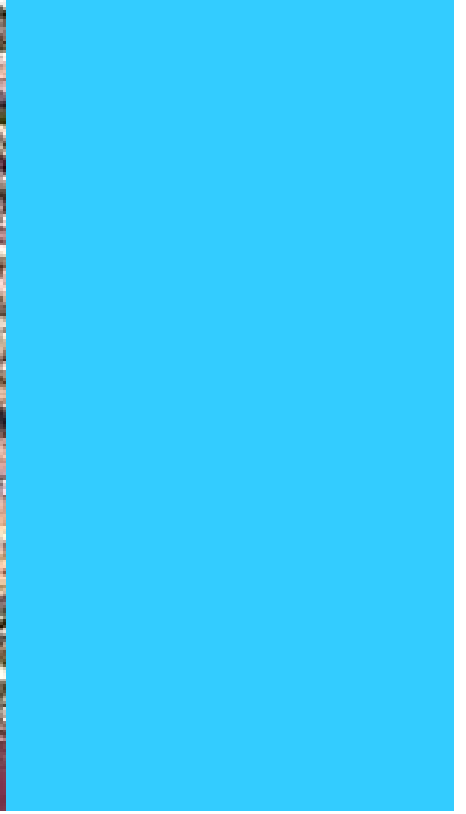


# **PRESENT & FUTURE DIRECTIONS OF CERTIFICATION FOR ENVIRONMENTAL SITE ASSESSORS AT APEA**

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# **THE NEED**

**SITE ASSESSORS WHO CAN MEET THE  
NEEDS OF INDUSTRY AND FINANCIAL  
INSTITUTIONS IN DEFINING  
“ENVIRONMENTAL LIABILITIES” OF A  
PROPERTY AND/OR BUILDING(S).**



# ISSUE

- **EXTENSIVE SET OF MUNICIPAL, PROVINCIAL AND FEDERAL LAWS AND REGULATIONS.**
- **CONSIDERABLE FOCUS ON IMPACT OF CHEMICALS ON HUMAN HEALTH & ENVIRONMENT.**
- **COMPLICATED BY DISTRIBUTION OF CHEMICALS IN AIR, SOILS, WATER, GROUNDWATER AND BUILDING MATERIALS.**

# **APPROACHES TO DEFINING ENVIRONMENTAL SITE ASSESSMENT**

- **CSA**

- **PHASE I IDENTIFIES POTENTIAL OR ACTUAL LIABILITIES**
- **PHASE II USES INTRUSIVE SAMPLING TO CONFIRM LIABILITIES**
- **PHASE III PROVIDES A REMEDIAL INVESTIGATION TO SCOPE THE PROBLEM(S) AND IDENTIFY CLEANUP**

- **CCME**

- **PHASE 1 IDENTIFIES POTENTIAL OR ACTUAL LIABILITIES**
- **PHASE 2 USES INTRUSIVE SAMPLING TO CONFIRM LIABILITIES**
- **PHASE 3 USES INTRUSIVE SAMPLING TO SCOPE AND QUANTIFY LIABILITIES**
- **PHASE 4 DEVELOPS A REMEDIAL ACTION PLAN FOR CLEANUP**
- **PHASE 5 IMPLEMENTS THE REMEDIAL PLAN**
- **PHASE 6 USES INTRUSIVE SAMPLING TO CONFIRM THE GOALS OF THE REMEDIAL PLAN ARE MET (CLOSURE SURVEY)**



# **IN THE BEGINNING (ABOUT 1990)**

- **SUDDEN NEED IN BUSINESS TO MEET NEW MORTGAGE FINANCING REQUIREMENT = NO ENVIRONMENTAL RISKS.**
- **BUT THE FINANCIAL COMPANIES, THE REALTORS AND THE BUYERS AND SELLERS RARELY UNDERSTOOD CONCEPT OF ESA.**
- **CONDUCTING A PHASE I ESA WAS A SORT OF BUILDING OR PROPERTY INSPECTION.**
- **GOOD COMMON SENSE WAS ADEQUATE TO CONDUCT THE ASSESSMENT.**
- **NEED FOR ENVIRONMENTAL LIABILITY INSURANCE WAS RARELY QUESTIONED.**
- **GOVERNMENTS WERE PROMOTING “GREEN BUSINESS”, SO WHY NOT JOIN THE BANDWAGON.**

# **EVOLUTION**

- **AS ENVIRONMENTAL LOSSES INCREASED, FINANCIAL INSTITUTIONS BECAME VERY KNOWLEDGEABLE, WITH “RISK MANAGEMENT DEPARTMENTS”.**
- **REALTORS AND LARGER DEVELOPERS BECAME MORE KNOWLEDGEABLE OF LIABILITIES.**
- **NEED FOR ENVIRONMENTAL LIABILITY AND E&O INSURANCE BECAME EVIDENT.**



# TODAY

- **REASONABLY KNOWLEDGEABLE BUSINESS COMMUNITY.**
- **REASONABLY KNOWLEDGEABLE FINANCIAL INSTITUTIONS.**
- **AVAILABILITY OF ENVIRONMENTAL LIABILITY INSURANCE.**
- **WEAK TO MEDIUM-STRENGTH REGULATORY AGENCIES.**

**BUT AS PRACTITIONERS WE  
STILL LACK ADEQUATE  
CERTIFICATION AND  
ASSURANCE FOR OUR CLIENTS  
THAT AN ASSESSMENT REPORT  
IDENTIFIES THEIR RISKS AND  
LIABILITIES.**

# **APEA'S DIRECTION THE BEGINNING**

- **CERTIFICATION SHOULD COVER BOTH AUDITING AND SITE ASSESSMENT.**
- **MANY OF THE SKILL AND EXPERTISE REQUIREMENTS WERE SIMILAR.**
- **UNDERSTANDING OF REGULATIONS AND LIABILITIES WAS EQUALLY CRITICAL.**
- **CONSULTANTS WITHIN THE REGION WERE OFTEN RETAINED FOR BOTH TASKS.**

# **APEA'S DIRECTION THE EVOLUTION**

- **CERTIFICATION SPLIT:**
  - **AUDITORS CERTIFIED BY CEAA.**
  - **SITE ASSESSORS CERTIFIED BY APEA.**
- **ORIGINAL ATTRIBUTES STILL REMAINED:**
  - **MANY OF THE SKILL AND EXPERTISE REQUIREMENTS WERE SIMILAR.**
  - **UNDERSTANDING OF REGULATIONS AND LIABILITIES WAS EQUALLY CRITICAL.**
  - **CLIENT NEED FOR CERTIFICATION.**
- **NEED IN REGION INCREASED WITH NEW PROVINCIAL REGULATIONS GOVERNING SITE ASSESSMENT AND REMEDIATION.**

# **PROBLEM #1**

- **FORMAL TRAINING**
  - **DALHOUSIE UNIVERSITY (CONT. TECH. ED.) OFFERS A 40-HOUR SITE ASSESSMENT COURSE, 4-6 TIMES PER YEAR.**
- **OTHER TRAINING?**
  - **e.g., HAZWOPER, ASBESTOS**

**HOW TO GET PRACTICAL EXPERIENCE?**

## **PROBLEM #2**

### **THE EXISTING PRACTITIONER**

- **LOTS OF “EXPERIENCE”**
- **CAN’T DIFFERENTIATE BETWEEN SUPERVISING UST REMOVAL AND PHASE II ESA.**
- **PROJECT MOSTLY DONE BY SUMMER STUDENT OR JUNIOR EMPLOYEE WITH MINIMAL SUPERVISION AND THEN SIGNED OFF BY PRACTITIONER.**

# **PROBLEM #3**

## **THE CLIENT**

- **ISSUES INADEQUATE TERMS OF REFERENCE.**
- **WANTS EXTENSIVE PROPOSAL; THEN BASES AWARD ON LOWEST PRICE.**
- **OFTEN LACKS UNDERSTANDING OF ROLE OF SITE ASSESSMENT WITHIN THE ENVIRONMENTAL MANAGEMENT NEEDS OF BUSINESS OR GOVERNMENT DEPARTMENT.**

# **APEA'S DIRECTION THE FUTURE**

- **INCREASING DEMAND FOR CERTIFIED SITE ASSESSORS WITH STRONG SET OF SKILLS AND EXPERTISE.**
  - **DIRECTION OF PROVINCIAL, REGIONAL AND FEDERAL REGULATORY POLICIES.**
  - **INCREASED KNOWLEDGE BASE OF BUSINESS AND FINANCIAL COMMUNITY.**
- **NEED FOR BOTH EXTERNAL CONSULTANTS AND INTERNAL STAFF.**
- **NEED FOR BETTER LINK TO AUDIT ACTIVITIES WITHIN ENVIRONMENTAL MANAGEMENT STRUCTURE.**



# **KEY ATTRIBUTES -1**

- **LEAD ASSESSOR WITH STRONG KNOWLEDGE OF CONTAMINANTS AND THEIR ASSOCIATED RISKS AND LIABILITIES.**
- **UNDERSTANDS A PROPERTY AND/OR BUILDING AS A “SYSTEM”.**
- **CAN IDENTIFY NEED FOR AND INCORPORATES TECHNICAL SPECIALISTS.**
- **CAN LEAD A TEAM OF ASSESSORS.**

## **KEY ATTRIBUTES - 2**

**HAS A FULL UNDERSTANDING OF THE ASSESSMENT PROCESS FROM INITIAL IDENTIFICATION OF POTENTIAL OR ACTUAL LIABILITIES TO SURVEY CONFIRMING CLEANUP GOALS HAVE BEEN ACHIEVED.**

**i.e., SHOULD FULLY UNDERSTAND AND HAVE EXPERIENCE IN ALL ASPECTS OF ASSESSMENT AND REMEDIATION.**

## **KEY ATTRIBUTES - 3**

- **THE CERTIFIED ENVIRONMENTAL SITE ASSESSOR IS NOT EXPECTED TO TAKE EVERY SAMPLE, TEST EVERY SAMPLE AND TO DESIGN AND OPERATE A REMEDIAL SYSTEM.**
- **THE CESA SHOULD BE ABLE TO UNDERSTAND WHAT IS NEEDED AND WHEN TO USE TECHNICAL AND SPECIALIST EXPERTISE.**
- **FUTURE REGULATORY/LIABILITY NEEDS WILL INCLUDE AIR QUALITY AND MARINE QUALITY ISSUES.**



**THANK YOU**