Alberta Environment's Strategic Goals

- Ensuring safe and sustainable use of the environment-
 - Providing a regulatory framework that clearly defines public expectations
 - Carrying out a compliance management program to ensure these expectations are met.
- Continuously improving environmental performance and maintaining the state of the environment-
 - Ongoing review and revision of standards in partnership with stakeholders
 - Use of appropriate technologies to improve performance, accountability.
- Providing assurance to the public regarding the state and sustainability of the environment-
 - Through provision of self-serve access to public information
 - Through public consultation where appropriate.

Alberta Environment's Current Business Objectives

- Guaranteeing a reliable supply of safe drinking water is a top priority
 - *Water for Life: Alberta's Strategy for Sustainability* has been initiated to ensure Alberta has:
 - Healthy ecosystems
 - Safe, secure drinking water
 - Reliable, quality water supplies for a sustainable economy and growing population
 - The knowledge necessary for making effective water management decisions

The project is holding public consultations March 6- April 3 to gather views on needs and priorities for the use of Alberta's water supply

 Improvements to drinking water quality monitoring and reporting were initiated earlier this year

• Streamlining information exchange using the Internet is a key direction for Alberta Environment. This will include:

- Secure submission of information required by Approvals, to support regulatory streamlining
- Secure, self-serve access by regulated parties and the department to confidential information
- Self-serve access to public information on legislative requirements, operational performance, and the state of the environment, for all interested parties

• Key improvements to Drinking Water Quality Monitoring and Reporting that are underway include:

- Electronic reporting of monitoring information
- Automated limit checking and assessment of compliance with Monitoring and Reporting requirements; automated notification to operators and AENV
- Public access to Drinking Water Quality Monitoring information

Summary of this initiative

- Alberta Environment is implementing secure electronic submission of operator-reported drinking water quality information.
 - Web forms for direct submission of monitoring information will be available for use starting April 2, 2002.
 - A "bulk transfer" process for submission of monitoring information in a standard file format will be available for use starting June 30, 2002
 - The schedule for implementation will depend on the readiness of operators to submit information electronically.
- Provincial Public Health labs will send results of bacteriological analysis of samples collected by the department and by plant operators to Alberta Environment using the same electronic reporting procedures. Commercial laboratories will send results of chemical analysis in the same way.
- Submitted data will be automatically compared with Approval Conditions to identify accidences of operating limits, and automated notice of exceedances will be provided to AENV staff and plant operators.
- Alberta Environment's website will provide public access to:
 - Operator-submitted drinking water quality monitoring information and applicable limits
 - Water Treatment Plant Inspection Reports
 - Water Treatment Plant Incidents and Enforcement Actions

Overview of Electronic Reporting

• The focus of the current initiative is on web-enabled reporting of monitoring information gathered by Approval Holders and reported to Alberta Environment

- This information has the greatest value as an indicator of the health status of drinking water supplies
- Other information, e.g. Operating Conditions, will continue to be reported in paper form
- There will be two means to submit information via the Internet:
 - Web forms for direct input of monitoring and reporting information
 - One form will be used for direct submission of self-reported monitoring information. This form will be automatically customized when you sign on, to reflect information requirements specific to your Approval
 - Another form will provide Compulsory Notification capabilities according to your Approval, including immediate notification and follow-up written notification. (24 Hour Hotline will remain in effect for Emergency Notification)
 - The only technical requirement will be Internet access with a current Web Browser
 - **A "bulk transfer" process** for large volume or frequent submissions that you choose to automate
 - Standard "flat file" formats will be defined for file submission
 - The intent is to be "technologically neutral"
- Electronic reporting procedures will be incorporated into:
 - "Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems"
 - o "Industrial Monitoring and Reporting Directive"
 - Your Approval
- Secure submission and feedback to submitters are key design features
 - Both means of submission will include user name/password protection and data encryption
 - Both means of submission will provide tools for submitters to review data prior to final submission
 - Web forms will include tools for users to edit data prior to submission, and to print a copy or save data to a file
 - o A distinct "Submit" button will be equivalent to an electronic signature

Both means of submission will enable operators to submit information as it is collected

- There will be no need to compile data over a specified time period (e.g. month, year) and submit it as a "package" (e.g. monthly or annual report).
- An automated process will compile information according to reporting periods defined in the Approval.

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Overview of Automated Compliance Assessment

• All information submitted electronically will be automatically checked for compliance with requirements of the current Approval including:

- Limit compliance- comparison with Approval Limits, and Guidelines for Canadian Drinking Water Quality, immediately after submission; comparison with "tiered", "allowance" or "reduction" limits for the period(s) specified in the Approval (e.g. monthly).
- **Monitoring compliance** comparison with Approval Conditions that define monitoring requirements (what must be monitored, where, when, and by what means) for the period(s) specified in the Approval.
- Reporting compliance- electronically submitted information will be assessed for fulfillment of Reporting Requirements on the due date identified in the Approval.
- Exceedance reports will be generated automatically, to provide feedback to the submitter and to inform Alberta Environment staff.
 - **Exceedances of "basic limits"** (limits which are never to be exceeded) will be determined prior to final submission.
 - **Exceedances of "tiered", "allowance" or "reduction" limits** will be determined at the end of the monitoring period specified in the Approval.
 - **Compliance with monitoring and reporting requirements** will be assessed for the monitoring period specified in the Approval on the reporting due date specified in the Approval.
- Exceedances that are identified by automated processes will be compared against Compulsory Notification Requirements in the Approval.
 - All Water Treatment Plant Approvals contain a requirement for immediate Emergency Notification under specified conditions.
 - Some Approvals contain requirements for immediate notification in certain other situations of non-compliance.
 - Other Approvals require immediate notification of all non-compliant situations.
- Exceedance reports will only be accessible to the operator or designate and to Alberta Environment staff until:
 - \circ $\,$ The reported exceedance has been confirmed as an Incident, and
 - \circ $\,$ The matter has been resolved and the Incident has been closed

Overview of Public Access Website

- Alberta Environment's Drinking Water Quality web page will provide public access to information held by the department including:
 - Environmental Protection and Enhancement Act
 - Approval Holder
 - Approval Details
 - Operator-reported Monitoring Data
 - Inspection Reports
 - Enforcement Actions
- The Drinking Water Quality web page will provide a link to:
 - Guidelines for Canadian Drinking Water Quality
 - Regional Health Authorities to determine if health advisories are in effect
 - Emergency Notification "Hotline" (toll-free 1-800-222-6514) to report a concern
 - o Information on the current status of Water Treatment Plant operations
- Information that is not considered to be public under the Environmental Protection and Enhancement Act and the Freedom of Information and Protection of Privacy Act will not be made available to the public on this website.
 - This information includes Calls made by the public, Incidents that have not been closed, and Investigations that have not been concluded.
 - Confidential information will only be made available to the regulated party to which this information refers, through a secure web connection.
- The public access website is currently under development and can be viewed at:

http://www3.gov.ab.ca/env/protenf/dwq/DWQ_MAIN.html

Plan for Implementation

- Factors affecting the timing of implementation include:
 - **Public concern** about the quality and safety of drinking water supplies
 - Requirements for rigorous testing of automated procedures in cooperation with each operator
 - **Readiness of Water Treatment Plant operators** to submit information electronically via the Internet
- The current plan includes two releases:
 - o March 31, 2002
 - Secure web form for direct submission of drinking water quality monitoring data
 - Electronic receipt of bacteriological sample data from the Provincial Laboratory of Public Health
 - Automated assessment of compliance with "basic limits" for drinking water quality and associated exceedance notification
 - Public access website
 - o June 30, 2002
 - Secure "bulk transfer" process for submission of drinking water quality monitoring information
 - Automated assessment of compliance with tiered, allowance and reduction limits, monitoring requirements and reporting requirements
 - Secure web form for Compulsory Notification as required by the Approval
 - This form will web-enable requirements for immediate notification in the event of non-compliance, and for a follow-up written report, for Approvals that have this requirement
 - This will NOT replace existing procedures for Emergency
 Notification, but will provide an alternative method of notification
 - "Release dates" indicate when tools will be available for use. Each release will be "phased in".
 - Timing will depend on the readiness of individual Operators, and will be determined in consultation with regional engineers

We Need Your Feedback

The following information will help us assess your readiness for electronic reporting.

Please complete this questionnaire and either:

- Leave it with us at the end of the presentation, OR
- Mail the completed questionnaire to:

Drinking Water Quality Monitoring Project Monitoring Division Alberta Environment 11th Floor Oxbridge Place 9820- 106 St. Edmonton, Alberta Environmental Protection T5K 2J6

OR

• Fax the completed questionnaire to:

Drinking Water Quality Monitoring Project Monitoring Division Alberta Environment FAX: 780/427-7958

Your name _____

Name of your Operation _____

Your Approval ID _____

- Does the Water Treatment Plant you operate currently have access to the Internet (Y/N):
 - o at the plant _____
 - elsewhere (e.g. at town office) _____
- If you have web access, which web browser and version do you currently use?
 - Internet Explorer Version _____
 - Netscape Navigator Version _____
 - o Other _____, Version _____

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- Do the staff who would be responsible for reporting for the Approved Operation have basic skills:
 - in the use of a Web Browser ? _____ (Y/N)
 - in the use of electronic forms? _____ (Y/N)
- Would designated staff require basic Internet training? _____ (Y/N)
- What would be your preferred mode(s) of training in use of electronic forms:
 - Web-based training (e.g. tutorial) _____ (Y/N)
 - Step by step manual _____ (Y/N)
 - Face to face or "classroom" training _____ (Y/N)
 - If face to face training is preferred, would you or your staff be able to travel to a central location to permit group training? _____ (Y/N)
- What would be the best place to direct people if they had a question about current operations or the quality of drinking water from the plant you operate?
 - A phone number for public inquiries _____ (Y/N).

If so, what number? _____-____

• A website _____ (Y/N)

If so, what is the url of your website?

Thank you for your cooperation!