City of Iqaluit
Sewage Lift Station Training Session
May 29, 2003 – City Council Chambers
Agenda

9:00 - 9:15 ***Item 1 – Greetings and Introductions City of Iqaluit***

9:15 to 9:40 ***Item 2 – Roles and Responsibilities – Gary Strong***

- Organizational Chart
- Roles of Mayor and Council
- Roles of Utility Foreman
- Roles of Utility Staff
- Questions

9:40 to 10:00 ***Item 3 – Due Diligence – Gary Strong***

- What is Due Diligence
- What can you do to make it work
- Questions

10:00 to 10:20 Coffee Break

10:20 to 11:20 ***Item 4 – Operations Manual – Gary Strong***

- Overview of Manual
- Use of Check lists
- Reporting structure
- Questions

11:20 to 12:00 ***Item 5 – Spill Contingency Plan– Gary Strong***

- Over view of what it contains
- Reporting structure
- Questions

12:00 to 13:00 Lunch

13:00 to 14:00 ***Item 6 - Site Visit to Lift Station Number 2 – Chris Freda***

- Go through Daily and weekly Check
- Questions

14:00 to 15:00 ***Item 7 - Site Visit to Lift Station Number 1– Chris Freda***

- Go through Daily and weekly Check
- Questions

15:00 to 15:30 Coffee and return to Council Chambers

15:30 to 16:00 ***Item 8 – Wrap Up and Questions - All***

CITY OF IQALUIT

SEWAGE LIFT STATION

TRAINING SESSION

MAY 29, 2003

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AGENDA

- Roles and Responsibilities
- Due Diligence
- Operations Manual
- Spill Contigency Plan
- Site Visits to Lift Stations 1 and 2

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Responsibilities

Mayor and Council

Chief Administrative Officer (CAO)

Director of Public Works

Municipal Services Foreman

Utility Foreman — Roads Foreman

Sewer and Water Staff — Streets and Roads Staff

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Responsibilities of Utility Foreman:

- Set schedule for routine maintenance
- Assign specific tasks to Sewer and Water Staff
- Verify that staff are trained to complete tasks
- Complete O&M of all underground works within annual budget for department
  - budget established by Director of Public Works
- Notify superior if replacement or repair of equipment requires additional funding
- Tell superior what adverse consequences could occur, if repairs not completed

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Responsibilities of Sewer and Water Staff

- Complete tasks assigned by Utility Foreman
  - Once assigned, the tasks are **your responsibility**
- Tell Utility Foreman immediately if you do not feel adequately trained to complete the work

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Due Dilligence

- What is it?
- Why is it important?
- Who does it protect?
- How does it work?

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Operations Manual

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Contents of O&M Manual

- Operators responsibilities
- Supervisors responsibilities
- Work schedules
- Maintenance schedules
- Checklists
- Inspection reports
- Contact lists

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Maintenance Schedule

- Minimum level of inspection and servicing required
- Inspections are for major equipment
- Based on industry standards
- Frequency may change on actual site conditions, or if some equipment is problematic

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Inspections Checklists

- Sewage Lift Stations are checked every workday by Utility Foreman, or designate
- Daily checks are to verify that:
  - The pumps are cycling
  - Building heat is being maintained
  - Sewage levels in the sump are within normal ranges
  - The station autodialer and alarm system is in ready mode

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Log books

- Log books are located at each station
- When a check is complete, the following is recorded:
  - time of check
  - activities undertaken
  - the person completing the check
  - observations made during the check
- Sign off when completed

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Why do you need to sign off?

- If a spill occurs, you may be charged under the Fisheries Act (or other Act).
- Signing off shows that reasonable steps were taken to prevent the spill.
- This is called **DUE DILIGENCE**
  - most common kind of defense against environmental violations

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Due Diligence

- For a Due Diligence defense, it must be proven that all reasonable care was taken to PREVENT an incident (i.e. spill).
- The defense does not apply to actions taken AFTER the incident.
- HOWEVER, actions taken after the incident may be used to reduce the penalty (if you are found guilty).

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Spill Contigency Plan

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Objectives of Spill Contingency Plan

- Outline a formal practical response system which can be implemented immediately in the event of a spill
- The plan is intended to promote the safe handling of potentially hazardous materials to minimize health hazards, environmental damage and clean-up costs
- Hazards of sewage:
  - Pathogens and bacteria
  - High concentrations of nutrients
  - May have metals

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Spill Contingency Plan

- Effectiveness of plan depends on:
  - Proper distribution of plan, to those personnel most likely to encounter spill
  - Training of these same personnel
  - Training of response personnel:
    - What actions they are required to take
    - What techniques and materials may be used

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First Person Response

- Be alert and consider your personal safety
- Assess the hazard to people near the spill and if possible, take action to control danger to human life
- If safe and practical, try to stop release of material
- Contact Town Dispatch
- Contact Utility Foreman

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Utility Foreman's Response

- Proceed to spill location
- Assess the situation and make arrangements for the first aid and removal of injured personnel
- If safe, stop release of material (if not done already)
- If possible, prevent spread of material
- Gather information
- Contact other Response Team On-site Coordinator (if required)
- Fill out Spill Form
- Contact CAO

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On-Site Coordinator

- Usually the Director of Public Works (or representative) or Fire Chief (or deputy)
- Has complete authority over the clean-up personnel and spill scene
- Evaluates initial situation and assesses the magnitude of the problem
- Activates response plan and calls out the key personnel
- Develops overall plan of action for spill containment and clean-up
- Ensures that the assigned responsibilities are carried out
- Assesses requirements for labour, equipment, materials, tools
- Report spill to Spill Line, if not already reported

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Response Team Leader

- Depends on type of spill, would normally be the Utility Foreman
- Responsible for all field operations in response to the spill
- Directs Spill Response Team in contaminant recovery, clean-up and disposal
- Provides advice to the on-site coordinator

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CAO

- Acts as the spokesperson with the public, media and government agencies
- Ensures that all relevant City staff receive adequate training in order to fulfill their responsibilities as part of the Spill Response Team

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Containment on Open Water

- Depends on whether material floats or sinks, and if water is flowing

For Floating material:

- Use of surface boom
  - In flowing water, boom should be stretched across the flow downstream of spill
  - In standing water, contain spill close to shore

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Containment on Open Water

For sinking material:

- A dyke should be constructed
  - In small amounts of flowing water, divert the flow around the material by dyking and ditching if possible
- On-site coordinator will have to judge whether impact of spill will be most reduced by containment or removal of containers from water

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Containment on Ice

Ensure that the ice is thick enough to hold ALL clean-up personnel, equipment and machinery.

If spill DOES NOT penetrate ice:

- Containment same as containment on land

If spill DOES penetrate ice:

- Containment resembles containment in open water

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Containment on Snow

- Compact snow around outside of perimeter of the spill area
  - Easily done with snowmobiles
- Construct and compact snow dams
- Locate the low point of the spill area, then clear channels in the snow to allow material not absorbed to flow into the low area
- Once collected, the spilled material contained in snow can be transported to disposal site.

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Containment on Land

- Initial containment step is to prevent further spread of material
- This is accomplished by dyking around spill, using heavy equipment
- Adsorbents should be used to prevent further spread or seepage

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