

Giant Mine Arsenic Trioxide Technical Workshop

June 22 - 24, 1999

Katimavik Room "B", Explorer Hotel, Yellowknife, Northwest Territories

Workshop Purpose and Objectives

Context

The *Giant Mine Arsenic Trioxide Technical Workshop* is a key part of a commitment to a broader *Giant Mine Arsenic Trioxide Management Strategy* being led by the federal government. The *Technical Workshop* is a key element in developing the engineering and scientific aspects and consider the public health and environmental safety issues of the broader *Management Strategy*. Other elements of this *Management Strategy* will address: public information and communication; future ownership and operations; and, legal liabilities. Taken together, the elements provide the basis for informing the public and addressing the issues related to the management of arsenic trioxide.

Workshop Purpose

The workshop will help develop a common understanding of the arsenic trioxide problem at Giant Mine, provide a forum to develop and apply arsenic trioxide management options evaluation criteria and process, and collectively determine an *Action Plan* to identify what needs to be done to more fully develop the most promising and appropriate option(s), including addressing data gaps, tasks, responsibilities, required resources and time lines.

Workshop Objectives

The *Technical Workshop* is structured in three parts and is intended to achieve the following specific objectives:

Part One: Developing A Common Understanding Of The Problem

1. Provide an historical overview of arsenic trioxide management at Giant Mine and the chronology of events related to the work completed to date on arsenic trioxide management practices and options at Giant Mine, including a summary of the legislative and regulatory regime, operational, geophysical, engineering & environmental parameters and the associated issues and challenges;

2. Outline the commitment to and elements of a broader Giant Mine Arsenic Trioxide *Management Strategy* being led by the federal government;
3. Confirm the proposed objectives of the *Giant Mine Arsenic Trioxide Management Project Description*. This will include an outline of the planning, and anticipated environmental review and decision making processes;

Part Two: Development & Application Of Options Evaluation Criteria and Process

4. Present a detailed overview of the range of available engineering and scientific options explored to date, including existing issues, data gaps, and work (ie. research and technology development; marketing and feasibility studies) in progress related to the various options;
5. Present and discuss a comparative evaluation matrix to *assess and rank* the various options using engineering, scientific, public health, environmental safety, economic, and social criteria that need to be considered;
6. Amend (as necessary) the comparative evaluation matrix to achieve *agreement* on suitable and appropriate criteria for the evaluation of arsenic trioxide management options;
7. Based on objective application of the evaluation criteria determine which arsenic trioxide management option(s) are the most promising and appropriate;

Part Three: Development Of An Action Plan For Detailed Options Analysis

8. Identify and discuss what needs to be done to more fully develop the selected option(s), including the development of a detailed *Action Plan* identifying tasks, responsibilities, required resources and time lines; and,
9. Present the findings and results of the workshop to the public and interested organizations.

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Katimavik Room "B" (Plenary Session Location), Explorer Hotel,
Yellowknife, Northwest Territories

Draft Agenda Day 1: June 22, 1999

08:30 - 09:00

Arrival and Registration

Plenary Sessions Open To The Public & Media For Observation

09:00 - 09:30

Welcome and Opening Remarks

- Welcome (Ethel Blondin-Andrew, MP Western Arctic, Co-Chair)
(Senior Representative, DIAND)
(Senior Representative, GNWT)
- Introduction of participants
- Purpose, Objectives and Anticipated Results From Workshop (Facilitator)
- Roles & Responsibilities and workshop "ground rules and procedures" (Facilitator)
- Overview of Logistics & Organization, Reference Materials and Displays (including a "reading and resource room" located in the XX Room (Explorer Hotel To Confirm)
- Keeping track and recording of discussions (Facilitator)
- Review of Participant Reference Binder (Facilitator)
- Agenda Review (Facilitator)
- Questions/discussion

PART ONE: DEVELOPING A COMMON UNDERSTANDING OF THE PROBLEM

09:30 - 10:10

Agenda Item No. 1: Overview of Arsenic Trioxide Management At Giant Mine and the Chronology of events Related to the Work Completed To date On Arsenic Trioxide Management Practices and Options (Objective 1)

- 30 minute presentation by Rick Allan, Manhattan Resources; Neill Thompson, DIAND and John Gale, FracFlow
- Questions/discussion

- 10:10 - 10:45 **Agenda Item No. 2: The Giant Mine Arsenic Trioxide Management Strategy Being Led By The Federal Government: Commitment and Action (Obj. 2)**
- 20 minute presentation by DIAND.
 - Questions/discussion
- 10:45 - 11:00 Break
- 11:00 - 11:30 **Agenda Item No. 3: Development Of The Giant Mine Arsenic Trioxide Project Description: Objectives & Performance Standards, Environmental Review & Decision Making Processes (Obj. 3)**
- 20 minute presentation David Livingstone, DIAND
 - Questions/discussion
- 11:30 - 12:00 **Agenda Item No. 4: Environmental Review Processes, Criteria, Factors and Considerations To Ensure Public Health and Environmental Safety: The Regulatory Perspective (Obj. 3)**
- 20 minute presentation by Heidi Klein, MVEIRB
 - Questions/discussion
- 12:00 - 1:00 Lunch (lunch will not be provided)

PART TWO: DEVELOPMENT & APPLICATION OF OPTIONS EVALUATION CRITERIA AND PROCESS

- 1:15 - 2:30 **Agenda Item No. 5: Framework For Assessing The Options: Preliminary Evaluation Criteria & Comparative Matrix**
- 15 minute presentation on evaluation principles, approaches & methods by Jim Micak, Facilitator
 - 30 minute presentation on preliminary evaluation criteria & a comparative matrix by Gary Strong, Dillon
 - Questions/discussion
 - Instructions for *Task 1 Working Groups*
- 2:30 - 2:45 Break

Workshop Open To The Media

2:45 - 4:30

Agenda Item No. 6: Task 1 Working Groups: To Discuss Options Evaluation Criteria (Objective 5 and 6)

- Working Group A: Katimavik "A", (Andy Swiderski, Facilitator)
- Working Group B: Katimavik "C", (Jim Micak, Facilitator)
- Recorders (XX)

4:30 - 5:30

Agenda Item No. 7: Plenary Session On Task 1: Working Towards Consensus On The Options Evaluation Criteria (Objective 5 and 6)

- 10 minute presentations by Working Group A and B on Task 1
- plenary open discussion
- Questions/discussion
- Instructions for *Task 2 Working Groups (Day 2 activity)*

5:30 - 5:45

Day One Wrap Up and Instructions for Day Two

5:45 - 6:00

Public Questions

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Draft Agenda Day 2: June 23, 1999

08:30 - 09:00

Arrival and Registration

Plenary Sessions Open To The Public & Media For Observation

09:00 - 09:15

Welcome and Opening Remarks

- Day 2 Welcome (Ethel Blondin-Andrew, MP Western Arctic, Co-Chair)
(Senior Representative, DIAND)
(Senior Representative, GNWT)
- Introduction of (new) participants
- Reconfirm Purpose, Objectives & Anticipated Results From Workshop (Facilitator)
- Review of Day Two Structure and Processes (Facilitator)
- Questions/discussion

PART TWO: DEVELOPMENT & APPLICATION OF OPTIONS EVALUATION CRITERIA AND PROCESS (Continued)

9:15 - 3:15

**Agenda Item No. 8: Engineering & Scientific Options Explored To
Date: Minimum Performance Criteria, Issues,
Data Gaps and Work In Progress (Obj. 4)**

Storage? #7 → ?

9:15 - 10:00

Option Number 1: Stabilization/Solidification

- 30 minute presentation by Bill Cullen
- 15 minute questions/discussion

10:00 - 10:45

Option Number 2: Autoclave

- 30 minute presentation by Mike Borden
- 15 minute questions/discussion

10:45 - 11:00

Break

- 11:00 - 11:45 **Option Number 3: Sublimation (WAROX)**
- 30 minute presentation by Serena Domvile & Kent Morton
 - 15 minute questions/discussion
- 11:45 - 12:30 **Option Number 4: Hot Water Leach**
- 30 minute presentation by John Dutrizak
 - 15 minute questions/discussion
- 12:30 - 1:30 Lunch (lunch will not be provided)
* Option To Serve Lunch for 30 minutes and continue with presentations to allow more time for Working Groups?
- 1:45 - 2:30 **Option Number 5: EMR Technologies**
- 30 minute presentation by John Tranquilla
 - 15 minute questions/discussion
- 2:30 - 3:15 **Option Number 6: Bio Leaching**
- 30 minute presentation by Ross Gilders
 - 15 minute questions/discussion
- 3:15 - 3:40 **Option Number 7: Pump and Treat**
- 15 minute presentation by John Brodie *move ?*
 - 10 minute questions/discussion
- 3:40 - 3:55 Break
- 3:55 - 4:45 **Agenda Item No. 9: Task 2 Working Groups: To Discuss Comparative Evaluation Matrix (and Weighting) (Objective 5 and 6)**
- Working Group A: Katimavik "A", (Andy Swiderski, Facilitator)
 - Working Group B: Katimavik "C", (Jim Micak, Facilitator)
 - Recorders (XX)
- 4:45 - 5:30 **Agenda Item No.10: Plenary Session On Task 2: Working Towards Consensus On The Comparative Evaluation Matrix (and Weighting) (Objective 5 and 6)**
- 10 minute presentations by Working Group A and B on Task 2
 - plenary open discussion
 - Questions/discussion
- 5:30 - 5:45 **Day Two Wrap Up and Instructions For Day Three**

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5:45 - 6:00

Public Questions

EVENING TECHNICAL ASSIGNMENT

Consulting team to amend comparative evaluation criteria and rank the options (based on the presentations and direction from the Working Groups) and prepare a presentation on an amended evaluation matrix for Day Three

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Draft Agenda Day 3: June 24, 1999

08:30 - 09:00

Arrival and Registration

Plenary Sessions Open To The Public & Media For Observation

09:00 - 09:15

Welcome and Opening Remarks

- Day 3 Welcome (Ethel Blondin-Andrew, MP Western Arctic, Co-Chair)
(Senior Representative, DIAND)
(Senior Representative, GNWT)
- Reconfirm Purpose, Objectives & Anticipated Results From Workshop (Facilitator)
- Detailed Review of Day Three Structure and Processes (Facilitator)
- Questions/discussion

09:15 - 10:30

Agenda Item No.11: Results Of The Amended Comparative Evaluation Criteria & Matrix: Ranking Of The Options: Determining The Most Appropriate and Promising Option(s) (Objective. 6 and 7)

- presentation by Andy Swiderski, Facilitator
- open plenary discussion
- Questions/discussion
- Instructions for *Task 3 Working Groups*

10:30 - 10:45

Break

PART THREE: DEVELOPMENT OF AN ACTION PLAN FOR DETAILED OPTIONS ANALYSIS

10:45 - 12:00

Agenda Item No.12: Task 3 Working Groups: Development Of An Action Plan For Detailed Option(s) Analysis: Strategic Considerations, Approaches and Key Elements (Objective. 8)

- Working Group A: Katimavik "A",
(Andy Swiderski, Facilitator)
- Working Group B: *Cumberland Room*,
(Jim Micak, Facilitator)
- Working Group C: **(If Required)**, Location TBD,
(Craig Thomas, Facilitator)
- Recorders (XX)

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- 12:00 - 1:00 Lunch (lunch will not be provided)
- 1:15 - 2:30 **Agenda Item No.12: Task 3 Working Groups: Development Of An
Action Plan For Detailed Option(s) Analysis:
Strategic Considerations, Approaches and Key
Elements (Continued) (Objective. 8)**
- 2:30 - 2:45 Break
- 2:45 - 4:30 **Agenda Item No.13: Plenary Session On Task 3: Consensus On The
Action Plan For Detailed Option(s) Analysis
(Objective 8)**
 - 10 minute presentations by Working Group A, B and C (?) on Task 3
 - plenary open discussion
 - Questions/discussion
- 4:30 - 5:30 **Agenda Item No.14: Findings and Results Of The Workshop:
Commitment and Action (Objective. 9)**
 - presentation by Co-Chair(s) and/or Facilitator(s)
 - Questions/discussion
- 5:30 - 5:45 **Public Questions**
- 5:45 **Workshop Closing Comments and Wrap Up**

Distribution List

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Neill Thompson	DIAND - Water Resources, NWT		
David Livingstone	DIAND - Renewable Resources & Envr		
Dave Nutter	DIAND - Special Advisor		
Kate Hearn	Minerals - DIAND		
Floyd Adlam or Alternate	Regional Operations /District - DIAND		
Cathy Jewison	Communications - DIAND		

Dave Milburn	Water Resources - DIAND		
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Name	Delegate	Organization	Phone	Address
Max Hall	his discretion	City of YK	(867) 920-5624	P.O. Box 580 Yellowknife NT X1A 2N4 669-3465
Blondin, Ted	Zaby Nevit	Treaty 11	(867) 392-6381	(867) 392-6389
McLeod, Bob	Terry Brookes attended last one Jim Coughlin	GNWT - MACA	(867) 873-7118	P.O. Box 1320 Yellowknife NT X1A 2Y9 873-7965
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Ronn Gilders — Bio Learning