

Royal Oak Mines Inc.
Arsenic Trioxide - Surface Storage and Handling
Project Scoping Document

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1.0 Introduction

- 1.1 Project Rationale
(new arsenic trioxide management plan, future reprocessing,
reduced liability, pro-active)
- 1.2 Project Description
(surface storage in tanks or containers, modified handling
procedures, mitigation of potential risks, first step towards
implementing a new process)
- 1.3 Site Description
(current physiographical and operational setting)
- 1.4 Historical Information
(review of past practice, operations, criteria for arsenic trioxide
management)

2.0 Project Components

- 2.1 General
- 2.2 Current Handling Practice and Storage System
 - 2.2.1 Roaster / Baghouse Operation
 - 2.2.2 Pneumatic Conveying
 - 2.2.3 Underground Storage
- 2.3 Proposed Handling Practice and Storage System
 - 2.3.1 Roaster / Baghouse Operation
 - 2.3.2 Handling Options
 - 2.3.3 Storage Options
- 2.4 Metallurgical Process
 - 2.4.1 Hot Water Leaching
 - 2.4.2 Ammonia Leaching
 - 2.4.3 Fuming (WAROX)
- 2.5 Storage and Plant Site Location
(two locations being evaluated)
- 2.6 Recovery of As_2O_3 from Underground Chambers
 - 2.6.1 Mining Methods
 - 2.6.2 Handling Systems
 - 2.6.3 Material Quality and Characteristics

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3.0 Project Economics

- 3.1 Capital Cost
- 3.2 Operating Cost
- 3.3 Revenue Opportunities
 - 3.3.1 Arsenic Trioxide Recovery
 - 3.3.2 Gold Recovery
- 3.4 Implementation Schedule
(for surface storage and also process development)

4.0 Risk Management

- 4.1 Identification of Potential Receptors and Pathways
- 4.2 Transportation Risk Assessment
(conveyor, truck, pneumatic)
- 4.3 Storage and Handling Risk Assessment
 - 4.3.1 Human Health
 - 4.3.2 Ecological

5.0 Occupational Health and Safety (regulations, safety issues, monitoring)

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6.0 Environmental Management

- 6.1 Monitoring Systems
(containment, hydrogeology, air)
- 6.2 Plant Closure
(stabilization of final residue, clean-up and decommissioning)

Contingency planning

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