International Uranium (USA) Corporation Presentation to Radiation Control Board

Dust Control at the White Mesa Mill

April 4, 2003

Presentation on Dust Control

- Why?
  - Perceived Concerns Over Dust From White Mesa Mill Site
- Overview of Regulatory and Site Controls
- Review of Monitoring Program Data

"Dust Concerns Are From a Number of Off Site Sources"

Regulatory Regime - NRC

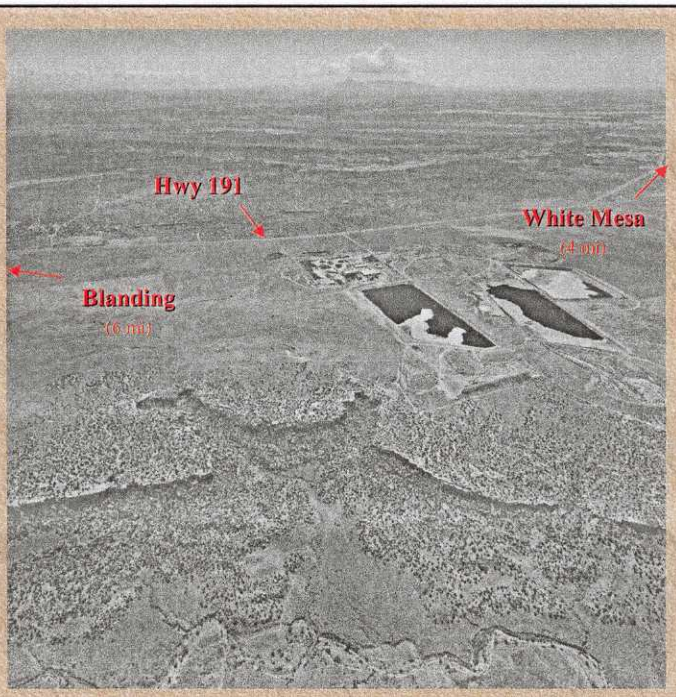
- Standard Operating Procedures For Dust Control
- Air Monitoring Program
  - Particulate – Weekly
  - Radionuclide - Quarterly
- August 2002 Inspection

  "The inspector observed the licensee utilizing two water spray processes for dust suppression during alternate feed loading into the feed screens."

Regulatory Regime - State

- Utah Air Quality Permit

  "That unpaved haul and access roads, and the Mill area itself, have at least one inch of gravel cover or be watered to meet the 20% opacity requirement."
- Mill Inspected Twice Last Year by Utah Division of Air Quality
  - "No Dust Observed" & "Mill Following Dust Control Procedures"


Hwy 191
White Mesa
(4 mi)
Blanding
(6 mi)

MAR 27, 2002

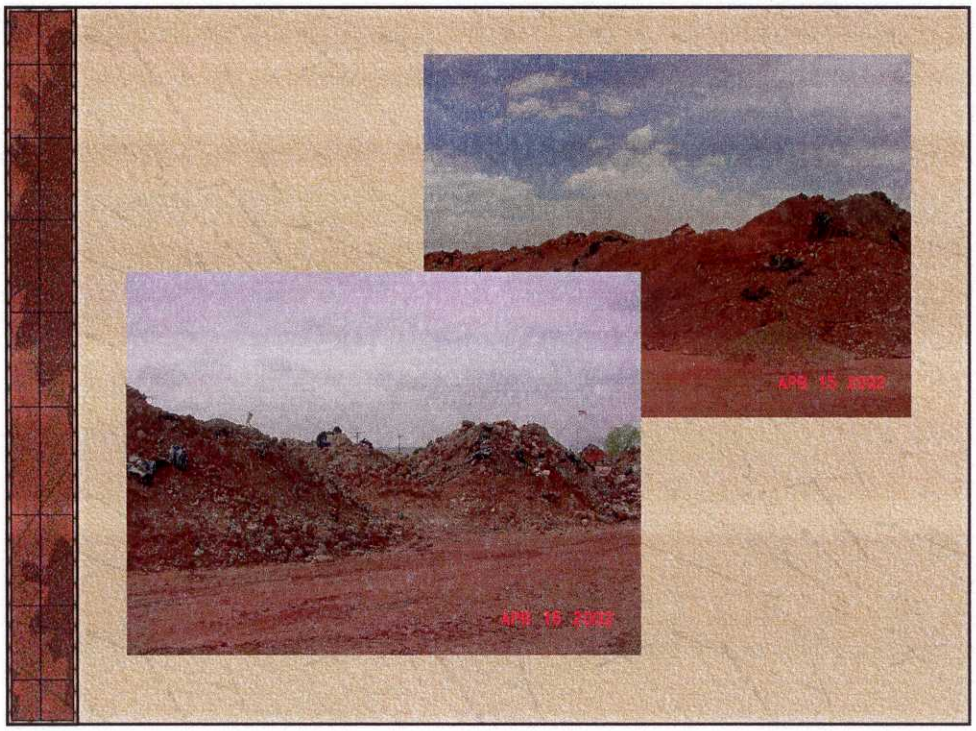
Soil Stockpiles
Ore Pad

Soil Stockpiles

- Soil Stockpiles
  - Highest Contours on Mill Site
  - Natural Top Soil, Clays, Soils and Rock
  - Reclaimed from Construction of Tailings Cells
  - Used for Interim and Final Cover of Tailings Cells

Ore Pad

- Used for Temporary Storage of Conventional Ore and Alternate Feed Material
- Dust Control Includes Use of Water Wagons & Spraying of Alternate Feed Materials During Unloading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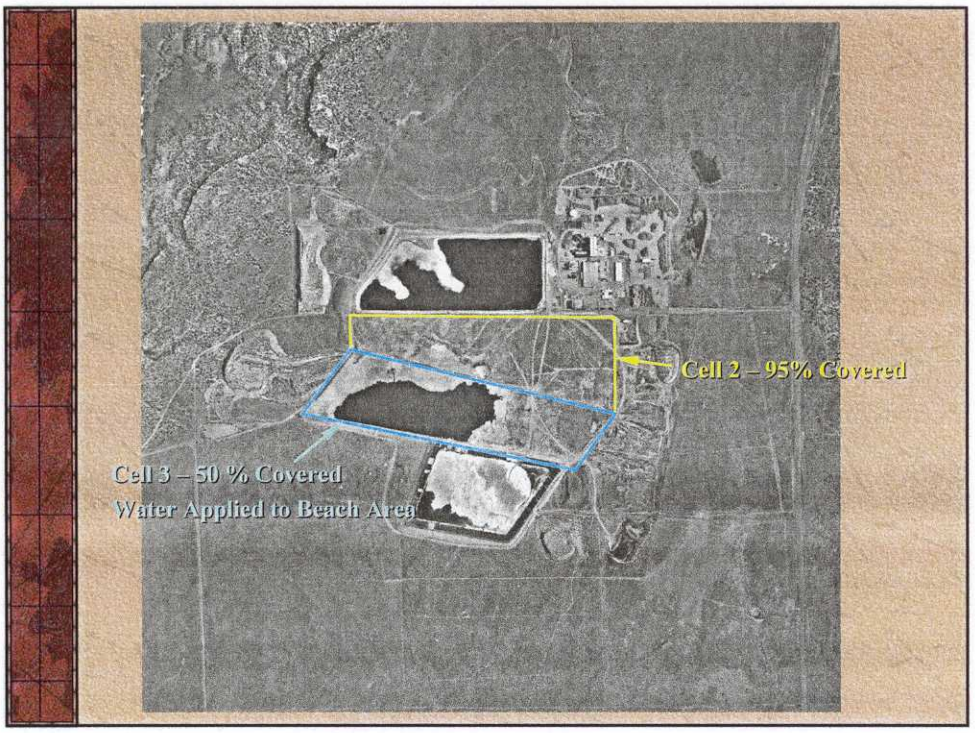
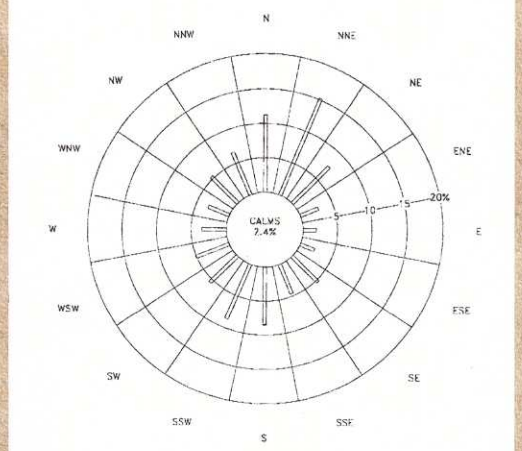
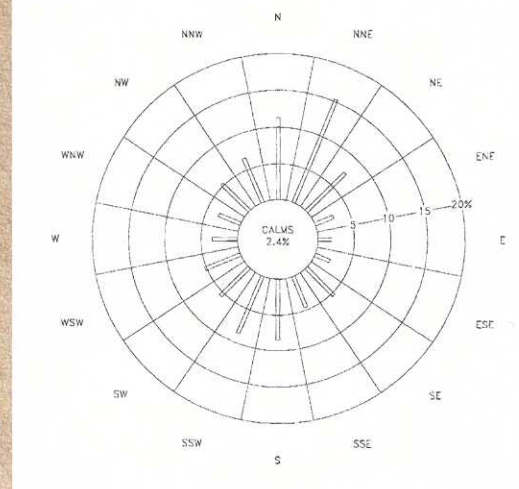

Cell 2 – 95% Covered
Cell 3 – 50 % Covered
Water Applied to Beach Area



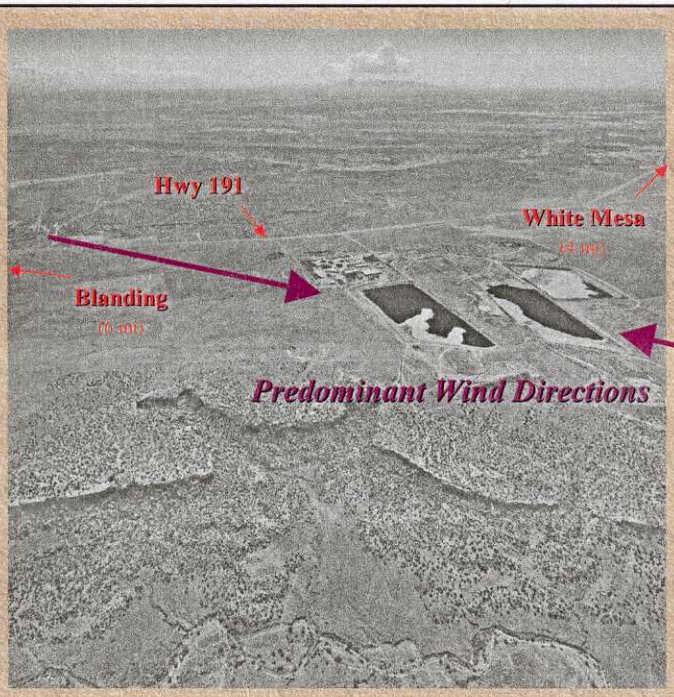
EnecoTech
ENVIRONMENTAL CONSULTANTS

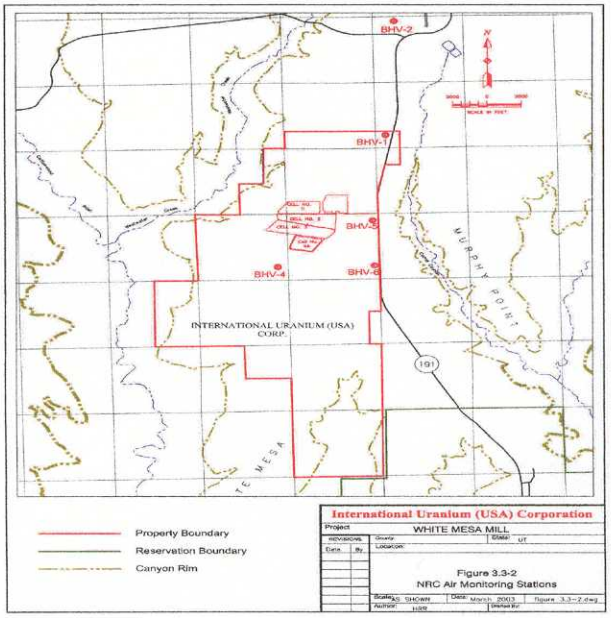
Project: White Mesa Mill	Wind Frequency Distribution For All Hours (January through June 2000)
International Uranium Corporation	
File No.: 105-019 / ACAD File No.: 105019N / Date: 4/13/01 / Rev.:	
Drawn By: LKB / Design By: JAK / Checked By: / Approved By: / Figure No.: 3.1	

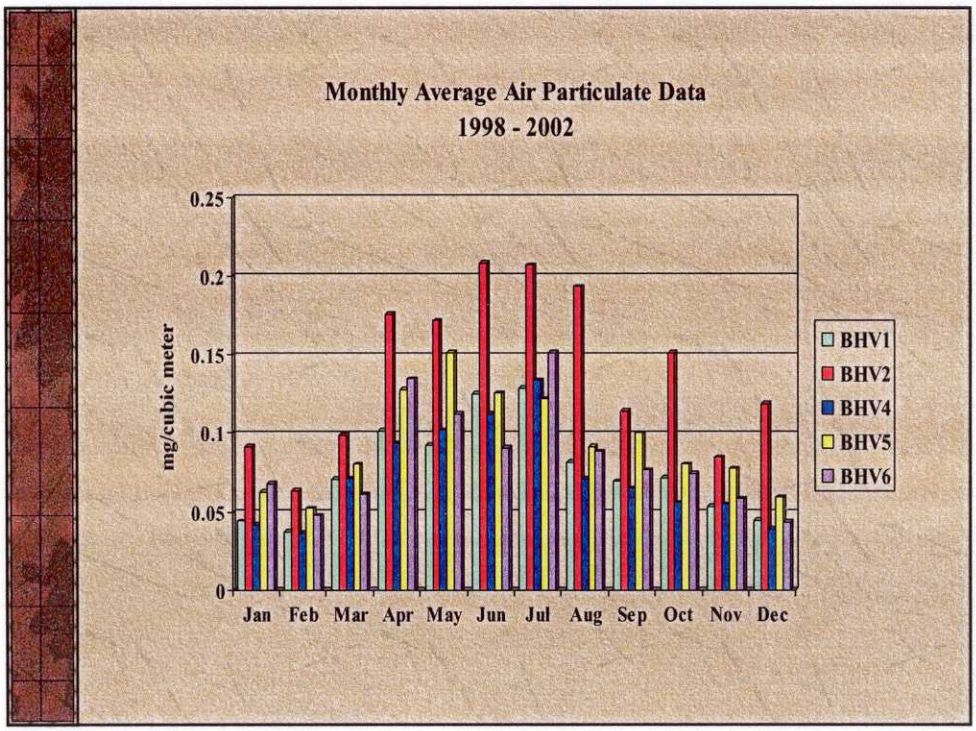


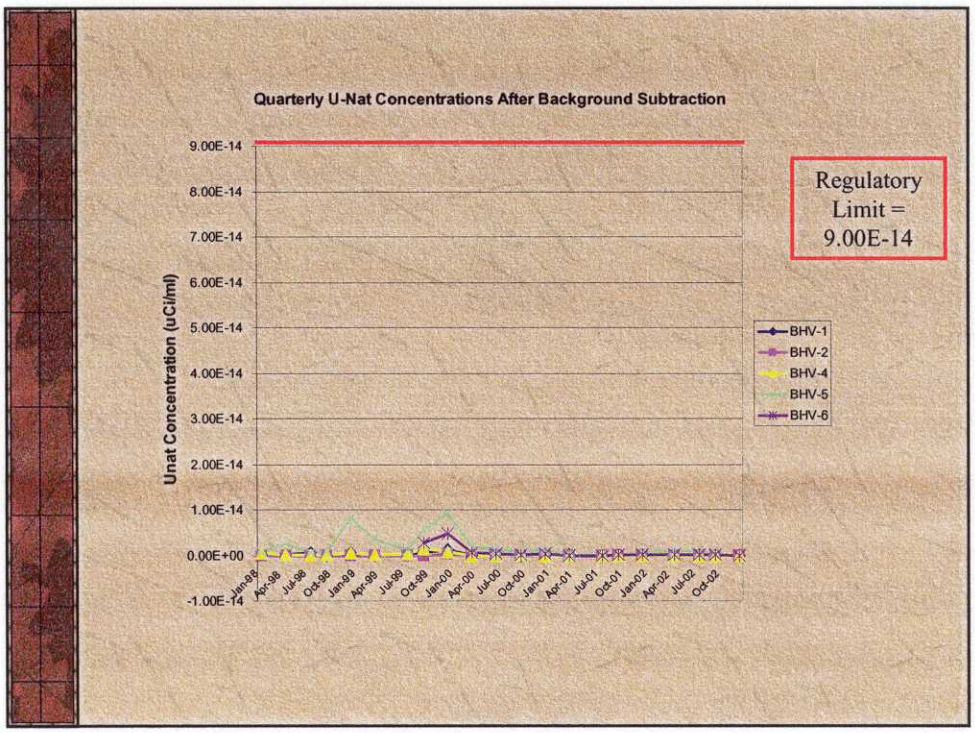
EnecoTech
ENVIRONMENTAL CONSULTANTS

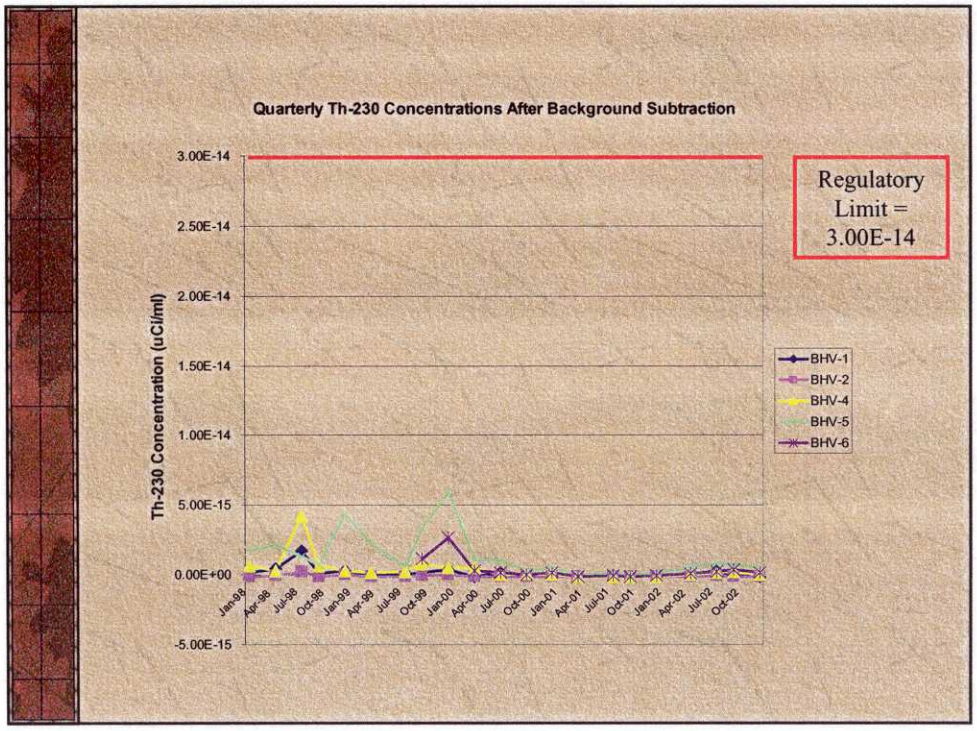
Project: White Mesa Mill	Wind Frequency Distribution For All Hours (July through December 2000)
International Uranium Corporation	
File No.: 105-019 / ACAD File No.: 1050190 / Date: 4/13/01 / Rev.:	
Drawn By: LKB / Design By: JAK / Checked By: / Approved By: / Figure No.: 3.1	

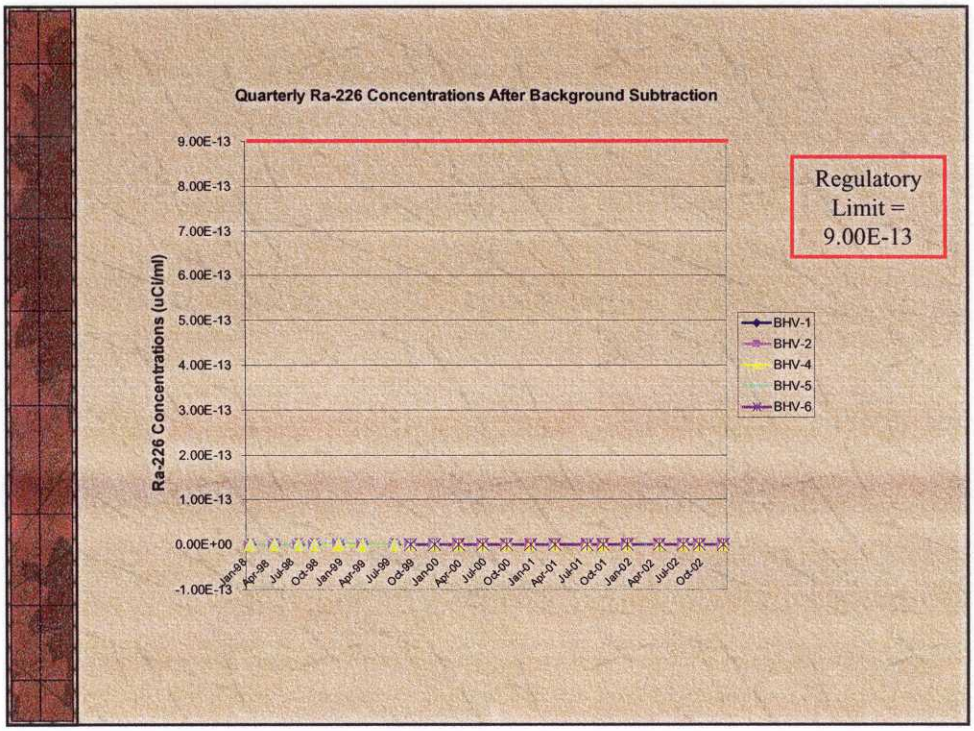

Hwy 191
White Mesa
(4 mi)
Blanding
(6 mi)
Predominant Wind Directions

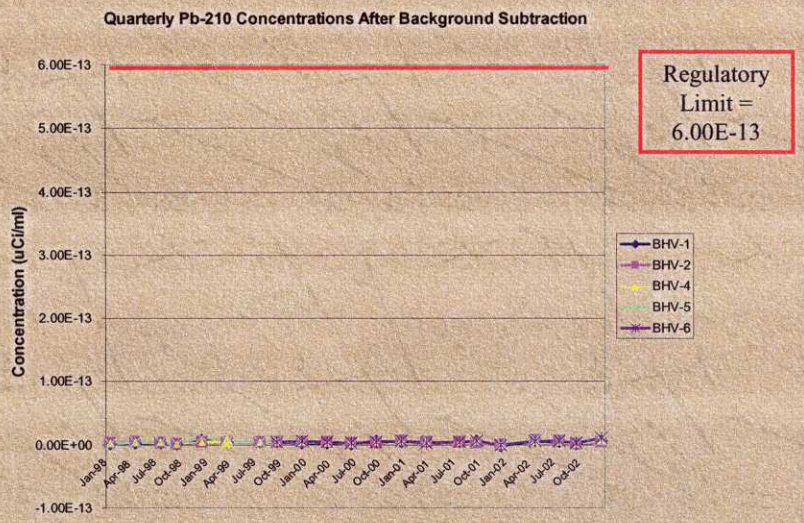

BHV-2
BHV-1
BHV-5
BHV-4
BHV-6
INTERNATIONAL URANIUM (USA) CORP.
MURPHY POINT
191
Property Boundary
Reservation Boundary
Canyon Rim
International Uranium (USA) Corporation
Project
WHITE MESA MILL
REVISIONS
Date
By
Location:
State: UT
Figure 3.3-2
NRC Air Monitoring Stations
Scale: AS SHOWN
Date: March 2003
Figure 3.3-2.dwg
Author: HRB


Monthly Average Air Particulate Data
1998 - 2002
mg/cubic meter
0.25
0.2
0.15
0.1
0.05
0
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
BHV1
BHV2
BHV4
BHV5
BHV6


Quarterly U-Nat Concentrations After Background Subtraction
Unat Concentration (uCi/ml)
9.00E-14
8.00E-14
7.00E-14
6.00E-14
5.00E-14
4.00E-14
3.00E-14
2.00E-14
1.00E-14
0.00E+00
-1.00E-14
Jan-98 Apr-98 Jul-98 Oct-98 Jan-99 Apr-99 Jul-99 Oct-99 Jan-00 Apr-00 Jul-00 Oct-00 Jan-01 Apr-01 Jul-01 Oct-01 Jan-02 Apr-02 Jul-02 Oct-02
BHV-1
BHV-2
BHV-4
BHV-5
BHV-6
Regulatory Limit = 9.00E-14


Quarterly Th-230 Concentrations After Background Subtraction
Th-230 Concentration (uCi/ml)
3.00E-14
2.50E-14
2.00E-14
1.50E-14
1.00E-14
5.00E-15
0.00E+00
-5.00E-15
Jan-98
Apr-98
Jul-98
Oct-98
Jan-99
Apr-99
Jul-99
Oct-99
Jan-00
Apr-00
Jul-00
Oct-00
Jan-01
Apr-01
Jul-01
Oct-01
Jan-02
Apr-02
Jul-02
Oct-02
BHV-1
BHV-2
BHV-4
BHV-5
BHV-6
Regulatory Limit = 3.00E-14


Quarterly Ra-226 Concentrations After Background Subtraction
Ra-226 Concentrations (uCi/ml)
9.00E-13
8.00E-13
7.00E-13
6.00E-13
5.00E-13
4.00E-13
3.00E-13
2.00E-13
1.00E-13
0.00E+00
-1.00E-13
Jan-98
Apr-98
Jul-98
Oct-98
Jan-99
Apr-99
Jul-99
Oct-99
Jan-00
Apr-00
Jul-00
Oct-00
Jan-01
Apr-01
Jul-01
Oct-01
Jan-02
Apr-02
Jul-02
Oct-02
BHV-1
BHV-2
BHV-4
BHV-5
BHV-6
Regulatory Limit = 9.00E-13



Conclusions

- Regulated & Inspected by both NRC and State of Utah
- Monitoring Programs are in Place
- Minimal Dust From Mill Site
- Dust From Site Poses No Radiological Hazard
- Observed Dust is From Off Site Sources
  - Confirmed by Data & Observations