SOLID WASTE MANAGEMENT UNITS (SWMU's)

Inco Alloys International, Inc.

Huntington, West Virginia

SWMU No.: 001

UNIT NAME: Container Storage Area

UNIT DESCRIPTION: This storage area is used for storage of drums of hazardous wastes as identified in 40 CFR Part 261. The unit is located on the Northeast corner of the facility. The storage area occupies a rectangular area of approximately 135 feet by 43.5 feet or 5,873 square feet. All hazardous wastes stored within this facility are to be containerized in containers approved by DOT. Containers containing liquid wastes are stored within the metal pans. The storage Cell No. 1 and Cell No. 2 have metal pans as secondary containment to contain any leak and/or rupture developed during storage. The developed during storage of the contain and the co

DATF

: Nov. 17, 1980

D

AE: Scheduled for closure by January 2005

JED: The following are hazardous wastes stored in the Container

Kolene Salt bath in Cell No. 4

Toxic Solid in Cell No. 3

- 3. Ignitable Hazardous waste in Cell No. 2
- 4. Non-Ignitable hazardous waste in Cell No. 1

RELEASE CONTROLS: Two metal pans for liquid waste storage drums.

HISTORY OF RELEASES: Unknown

REFERENCES: Part B application and Visual Site Inspection.

ACTION RECOMMENDED: At a minimum, one (1) round of soil sampling should be performed in order to determine the status of the subsurface soil in the vicinity of this unit.

SWMU No.: 002

UNIT NAME: Baghouse Dust Storage Area (Closed on March 27, 1987)

UNIT DESCRIPTION: This storage area was used for the storage of boxes of baghouse dust which was hazardous waste by characteristic. The unit was located on the North side of the Stores Department in the "Nickel Storage Pad" area. The storage area was a concrete pad roofed over with 104 feet by 86 feet dimensions (8,944 square feet). All hazardous waste stored within this unit were containerized in approved DOT shipping containers. This unit was closed in March, 1987; however, the State of West Virginia, Department of Natural Resources, Waste Management Section has never received a final closure certification from the permittee.

DATE OF START-UP: Unknown

DATE OF CLOSURE: March 27, 1987

WASTE MANAGED: 1. Melting Department Baghouse Dust

2. B-40 Baghouse Dust

RELEASE CONTROLS: Unknown

HISTORY OF RELEASES: Unknown

REFERENCES: Closure plan and unit process description included in Part B application.

ACTION RECOMMENDED: No further action is recommended since the storage area had a concrete floor and was roofed during its useful life.

SWMU No.: 003

UNIT NAME: Nitric - HF Storage Tank (Closed January, 1992)

UNIT DESCRIPTION: This unit was an 8000 gallon storage tank located in Acid Reclaim Pretreatment, metals recovery, area. Cold Draw spent nitric - HF acids, Corrosive hazardous waste, was received and stored in this tank. The tank was an inground Fiber glass storage tank with concrete secondary containment. The tank was closed and removed from the ground in January, 1992. The final closure certification has not been submitted to this office.

DATE OF START-UP: About 1957

DATE OF CLOSURE: January, 1992

WASTE MANAGED: Nitric Spent Acid, Corrosive hazardous waste

RELEASE CONTROLS: Concrete secondary containment.

HISTORY OF RELEASES: The concrete secondary containment for the this unit was inspected visually during VSI. There were signs of releases and concrete was severely contaminated. A large hole was notice on the body of the tank.

REFERENCES: Drawing number D-26320 submitted on Nov. 07, 1992 and VSI visit to the facility.

SWMU No.: 004

UNIT NAME: Waste Holding Tank

UNIT DESCRIPTION: This is a 8000 gallons hazardous waste storage tank located in Acid Reclaim Pretreatment, metals recovery, area. The hazardous waste received from off-site facility, INCO's Burnaugh plant, are stored in this tank prior to equalization. This unit is not a permitted RCRA hazardous waste management unit.

DATE OF START-UP: Unknown

DATE OF CLOSURE: Still in operation

WASTE MANAGED: 1. Alkaline Cleaners

2. Kolene Rinse, characteristic hazardous waste.

RELEASE CONTROLS: Unknown

HISTORY OF RELEASES: Unknown

REFERENCES: Drawing number D-26320 submitted on Nov. 07, 1992.

ACTION RECOMMENDED: At a minimum, one (1) round of soil sampling should be performed in order to determine the status of the subsurface soil in the vicinity of this unit.

SWMU No.: 005

UNIT NAME: Spent Acid Storage Tank System

UNIT DESCRIPTION: This unit consisted of three below ground acid brick - lined concrete storage tanks with a total capacity of approximately 71,000 gallons located in Acid Reclaim Pretreatment area. The East tank, known as Monel Storage Tank, has 55,000 gallons, the Southwest tank has 8,000 gallons and Northwest tank has 8,000 gallons capacity. At the present, only the Monel Storage Tank is in operation. The other two tanks, Southwest and Northwest storage tanks were closed in 1982 and the closure was certified January 17, 1983.

DATE OF START-UP: 1948

DATE OF CLOSURE: Two 8000 gallon tanks were certified closed on January 17, 1983. One tank, Monel Storage tank, is still in operation.

WASTE MANAGED: The following is list of waste stored in the tanks:

- 1. Spent Pickling Acids.
- 2. Sludge from the pickling rinse water.
- 3. Copper Nickel spent plating solutions.
- 4. Dust from Air Pollution control units.
- 5. Spent Pickling solution from Off-site (Burnaugh plant).

RELEASE CONTROLS: Unknown

HISTORY OF RELEASES: Unknown

REFERENCES: Part B application and closure plan submitted to EPA region III office.

SWMU No.: 006

UNIT NAME: Neutralization Tank

UNIT DESCRIPTION: This treatment tank is located in the Acid Reclaim Pretreatment area, metals recovery, has a capacity of 5,000 gallons. The hazardous waste stored in Monel tank is pumped to this tank for Neutralization process.

DATE OF START-UP: Unknown

DATE OF CLOSURE: Scheduled for closure by January, 2005

WASTE MANAGED: The following hazardous waste are neutralized in this unit:

- 1. Spent Pickling Acids.
- 2. Sludge from the pickling rinse water.
- 3. Copper Nickel spent plating solutions.
- 4. Dust from Air Pollution control units.
- 5. Spent Pickling solution from Off-site (Burnaugh plant).

RELEASE CONTROLS: Unknown

HISTORY OF RELEASES: During VSI, evidence of overflow was noticed on the outside wall and floor in the immediate area of the tank.

REFERENCES: Visual Site Inspection (VSI) and drawing number D-26320

SWMU No.: 007

UNIT NAME: Old West Tailing Pond (Closed in 1971)

UNIT DESCRIPTION: This unit was a surface impoundment used for storage of hazardous wastes for nearly twelve (12) years. The wastes stored were liquid. The impoundment was closed in place. There is no record to prove that the sludge was stabilized when the covering cap was placed on the lagoon. The size of this unit is unknown. It was located in the northwest portion of the facility.

DATE OF START-UP: 1958

DATE OF CLOSURE: 1971

WASTE MANAGED: The following is a list of hazardous wastes stored in this unit:

- 1. Neutralized spent acids, D007, D008, liquid.
- 2. Alkaline permanganate solution, D002, D007, liquid.
- Oxalate solution, D007, liquid.
- 4. Borax coating solution, D007, liquid.

RELEASE CONTROLS: Unknown

HISTORY OF RELEASES: Unknown

REFERENCES: West Virginia Hazardous Waste Survey conducted in 1982.

SWMU No.: 008

UNIT NAME: Old Lagoon No. 1 (Closed in 1958)

UNIT DESCRIPTION: This unit was a surface impoundment used for storage, treatment, and disposal of hazardous wastes for nearly ten years. The wastes stored were both liquid and solid. The treatment applied to the wastes was of Chemical/Biological type. The impoundment was closed in place. sludge within the impoundment was not stabilized when the covering cap, consisting of general fill materials, was placed on lagoon. The impoundment occupied an estimated area of 0.24 acres. The unit was located in the Northeast portion of the facility. The lagoon construction did not include a liner of any type. Presently, the Equalization tank known as Liquid Waste Pretreatment Tank is erected at this location.

DATE OF START-UP: 1949

DATE OF CLOSURE: 1958

WASTE MANAGED: The following is a list of hazardous wastes stored in the unit:

- Liquid Spent Acid characterized as D002, D007, and D008.
- 2. Liquid Alkaline Cleaning Solutions characterized as D002.
- 3. Liquid Permanganate Solution characterized as D002 and D007.
- 4. Solid Lead Compounds characterized as D008.
- 5. Solid Chromium Compounds characterized as D007.

RELEASE CONTROLS: Unknown

HISTORY OF RELEASES: Unknown

REFERENCES: West Virginia Hazardous waste Survey Report submitted in 1982.

SWMU No.: 009

UNIT NAME: Old Lagoon No. 2 (Closed in 1980)

UNIT DESCRIPTION: This impoundment was used for storage, treatment, and disposal of hazardous wastes for ten (10) years. This unit occupied an estimated area of 2400 square feet. The sludge within the impoundment passed the EP Toxicity test, per a facility representative. However, there is no documentation of the beforementioned test available. During the active life of this unit, non-soluable waste oil was skimmed off and sold to off-site buyers for recycling.

DATE OF START-UP: 1970

DATE OF CLOSURE: 1980

WASTE MANAGED: The following is a list of hazardous wastes stored in the Lagoon No. 2:

- 1. Liquid Spent Acid characterized as D002, D007, and D008.
- 2. Liquid Alkaline Cleaning Solutions characterized as D002.
- 3. Liquid Permanganate Solution characterized as D002 and D007.
- 4. Oxalate Solution characterized as D002 and D007.
- 5. Borax Coating Solution characterized as D007.

RELEASE CONTROLS: Unknown

HISTORY OF RELEASES: Unknown

REFERENCES: West Virginia Hazardous Waste Survey Report submitted in 1982.

SWMU No.: 010

UNIT NAME: Old Lagoon No.3

UNIT DESCRIPTION: This unit was a surface impoundment used for storage of wet scrubber wastewater. The Acid Reclaim Pretreatment unit got on fire in 1978 which caused the process of sludge dewatering and sludge roasting to slow down. Then, the unit was constructed to hold wet sludge and water from wet scrubber unit. The unit was about 700 feet square in area and about three (3) feet deep.

DATE OF START-UP: April, 1978

DATE OF CLOSURE: August, 1978

WASTE MANAGED: Wet hazardous waste sludge and scrubber water.

RELEASE CONTROLS: Unknown

HISTORY OF RELEASES: Unknown

REFERENCES: West Virginia Hazardous Waste Survey Report submitted in 1982.

SWMU No.: 011

UNIT NAME: Landfill (Closed in 1964)

UNIT DESCRIPTION: This unit was a landfill used for disposal of hazardous wastes. Solvents and Cyanide Salt (F wastes) and characteristic wastes (D wastes) were disposed of in this unit for fourty-four (44) years. The landfill was closed in 1964. A layer of asphalt and/or concrete is placed on the capped landfill. The wastes were left in place at the time of closure.

DATE OF START-UP: 1920

DATE OF CLOSURE: 1964

WASTE MANAGED: The following waste streams were disposed of in this unit;

- 1) Cyanide Bearing Heat-treating Salts, F011, Solid.
- 2) Kolene Salt Bath, Oxalate and Permanganate Sludges, D007, Solid
- Kolene Salt Bath, Oxalate and Permanganate Sludges, D007, Solid.
- 4) Solvents F001, F002, F003, F005 and D001 Liquids.

RELEASE CONTROLS: Unknown

HISTORY OF RELEASES: Unknown

REFERENCES: West Virginia Hazardous Waste Survey Report submitted in 1982.

SWMU No.: 012

UNIT NAME: Waste Pile (Closed in 1978)

UNIT DESCRIPTION: An area adjacent to Old Lagoon #3 was used for storage of Tailing Sludge and other unspecified non-hazardous wastes.

DATE OF START-UP: 1974

DATE OF CLOSURE: 1978

WASTE MANAGED: Unspecified Non-Hazardous solid waste and tailing sludge.

RELEASE CONTROLS: Unknown

HISTORY OF RELEASES: Unknown

REFERENCES: West Virginia Hazardous Waste Survey Report submitted in 1982.

SWMU No.: 013

UNIT NAME: Sulfuric Acid Spill Area

UNIT DESCRIPTION: Area of Sulfuric Acid spill in July, 1990. The spill capacity was absent 300-500 gallons of pure sulfuric acid.

DATE OF START-UP: July, 1990

DATE OF CLOSURE: July, 1990

WASTE MANAGED: Spilled Sulfuric Acid

RELEASE CONTROLS: None

HISTORY OF RELEASES: This spill was never reported to OWM.

REFERENCES: Emergency Response Spill report and facilities representatives during VSI.

ACTION RECOMMENDED: At a minimum, one (1) round of soil sampling should be performed in order to determine the status of the subsurface soil in the vicinity of this unit.

SWMU No.: 014

UNIT NAME: Multihearth Roasting Furnace Area

UNIT DESCRIPTION: The area around exit door of Multihearth Roasting Furnace was contaminated with spilled characteristic hazardous waste. A sampling of soil in the area was conducted in March, 1992. Low level contamination was found.

DATE OF START-UP: Unknown

DATE OF CLOSURE: March, 1992

WASTE MANAGED: Contaminated soil by characteristic (chromium) hazardous

waste.

RELEASE CONTROLS: Unknown

HISTORY OF RELEASES: Unknown

REFERENCES: Compliance Evaluation Inspection conducted in November, 1991.

ACTION RECOMMENDED: Based on the result of the investigation of March, 1992, no further action is recommended.

SWMU No.: 015

UNIT NAME: Barium Chloride Area (Closed)

UNIT DESCRIPTION: Barium Chloride Salt furnaces. This salt was used in heating tanks in the area of this unit. The hazardous waste generated was disposed of in the landfill which was closed in 1964. The method of disposal after 1964 is unknown.

DATE OF START-UP: Unknown

DATE OF CLOSURE: 1985

WASTE MANAGED: Barium Chloride Salt, characteristic hazardous waste.

RELEASE CONTROLS: Unknown

HISTORY OF RELEASES: Unknown

REFERENCES: VSI visit conducted in January, 1992.

ACTION RECOMMENDED: This unit must be closed properly. The existing furnaces and all hazardous wastes must be removed and extinct of contamination release, if any, to ground and groundwater. This should be determined by soil and groundwater sampling and analysis.

SWMU No.: 016

UNIT NAME: Existing West Tailing Pond

UNIT DESCRIPTION: This unit is located in the western corner of the facility. It is permitted by the Office of Water Resources, Industrial Waste Branch. An application for permit was submitted in 1974 and again in 1985.

DATE OF START-UP: Prior to 1974

DATE OF CLOSURE: Presently in operation.

WASTE MANAGED: Sludge from Wastewater treatment plant is stored in this for dewatering prior to disposal in the Huntington Landfill. Based on EP toxicity sampling and analysis, this waste was characterized as Non-Hazardous.

RELEASE CONTROLS: Unknown. There are four (4) monitoring wells as required by WV OWR, NPDES Permit.

HISTORY OF RELEASES: Unknown. However, sampling of stored sludge in March, 1992 revealed that the sludge pile was mostly hazardous waste.

REFERENCES: Correspondence from facility to the OWM in regard to sampling of stored sludge in the west tailing pond in Feb., 1992.

ACTION RECOMMENDED: At a minimum, one (1) round of soil sampling should be performed in order to determine the status of the subsurface soil in this unit. Also, if warranted, a groundwater monitoring program investigating hazardous wastes releases to the groundwater should be implemented.

XI. REFERENCES

- 1. Huntington Alloys, Inc., Hazardous Waste Permit Application, Parts A & B, November, 1980, as revised May 21, 1981, May 27, 1981, August 11, 1981, and May 17, 1982.
- 2. J. W. Barta, Huntington Alloys, letter to Regional Administrator, EPA Region III, Re.: **two rectangular waste acid storage tanks clsoure**, January 17, 1983.
- 3. Carrol D. Davidson, Huntington Alloys, letter to West Virginia Division of Water Resources, Re.: Spent Acid Storage Tank structural integrity, January 13, 1983.
- 4. West Virginia Division of Water Resources, Hazardous Waste Management Permit issued to Huntington Alloys, Inc., June 25, 1984.
- C. E. Manilla, Huntington Alloys, letter to West Virginia Division of Water Resources, Re.: Company's name change, October 19, 1984.
- 6. Shad Kianouri, West Virginia Division of Water Resources, letter to Huntington Alloys International, Inc., Re.: Closure Plan for Baghouse Dust Storage Area, January 15, 1987.
- 7. J. W. Brata, Huntington Alloys International, Inc., letter to West Virginia Division of Water Resources, Re.: Closure Certification for Baghouse Dust Storage Area, May 27, 1987.
- 8. Wayne Wang and David L. Bumgarner, Kemron Environmental Services, Analytical Report for Inco Alloys, submitted to West Virginia Division od Waste Management, Re.: Hurrican Volunteer Fire Department site, November 20, 1987.
- 9. J. W. Barta, Inco Alloys International, Inc., letter to West Virginia Division of Waste Management, Re.: Analytical result on soil samples from Fire Training Pit at Hurrican Volunteer Fire Department, December 10, 1987.
- 10. Carrol Cather, West Virginia Waste Management Section, letter to Inco Alloys International Inc., Re.: **Draft Administrative Order**, October 7, 1991.
- 11. John M. Meek, West Virginia Waste Management Section, letter to Inco Alloys International Inc., Re.: **Draft Administrative Order**, January 26, 1989.
- 12. Robert R. Wilson, Huntington Sanitary Board, **Industrial Waste Discharge Permit** issued to Inco Alloys International, Inc, (Permit No.: 0187017), April 1, 1988.

- 13. West Virginia Division of Water Resources. Industrial Waste Section issued permit to Inco Alloys International, Inc. to operate an industrial tailing pond (IWL-6312-85), October 9, 1985.
- 14. West Virginia Air Pollution Control Commission, **Operating Permit** issued to Inco Alloys International, Inc.,
- 15. West Virginia Waste Management Section generator and TSDF inspection reports of Inco Alloys International, Inc., Huntington plant, April 14, 1982, and subsequent dates: May 6, 1983, June 25, 1984, Feb. 11, 1985, March 27, 1986, January 9, 1987, June 12, 1987, August 19, 1987, December 30, 1987, November 9, 1988, January 26, 1989, November 13 & 16, 1990, October 7, 1991 and March 30, 1992.
- 16. W. L. Healy, Inco Alloys International, Inc., letter to A. S. Talebi, West Virginia Office of Waste Management, Re.: Manufacturing Process Description, Feb. 17, 1993.
- 17. W. L. Healy, Inco Alloys International, Inc., submittal to West Virginia Office of Waste Management, Re.: **Drawing No. D-26320, Inco Wastewater Treatment System**, Nov., 1991.
- 18. W. L. Healy, Inco Alloys International, Inc., letter to A. S. Talebi, West Virginia Office of Waste Management, Re.: **Sludge Disposal**, October 27, 1992.
- 19. W. L. Healy, Inco Alloys International, Inc., letter to A. S. Talebí, West Virginia Office of Waste Management, Re.: Acid Reclaiming Operation Site Characterization Sampling Results, May 1, 1992.
- 20. Office of Rediological Weahter Report for Huntington Area, 1991.
- 21. W. L. Healy, Inco Alloys International, Inc., letter to Office of Emergency Response, Re.: Sulfuric Acid Spill Report, July, 1991.
- 22. West Virginia Hazardous Waste Survey, Nov., 1982.
- 23. W. L. Healy, Inco Alloys International, Inc., letter to Gil Sattler. West Virginia Office of Waste Management, Re.: **Information on USTs**, September 5, 1991.
- 24. West Virginia Division of Water Resources, Industrial Waste Section reissued permit to Inco Alloys International, Inc. to operate an industrial tailing pond (IWL-6325-91), September 30, 1991.
- 25. West Virginia DEP, Office Waste Management **Spill follow up** inspection reports of Inco Alloys International, Inc., Huntington plant, August 11. 1992.