EXECUTIVE SUMMARY

Prepared April 12, 1995

Mine Name: Iron Mountain Mine
Operator: Geneva Steel Corporation
P. O. Box 2500
Provo, Utah 84603

Telephone: (801) 227-9000
Contact Person: Mr. Roy Benson

I.D. No: M/021/008
County: Iron
New/Existing: Existing
Mineral Ownership: Private/BLM
Surface Ownership: Private/BLM
Lease No.(s):
Permit Term: 5 year mine plan

Life of Mine: Drilled reserves are estimated at 300 million tons. Present and projected mine plan development for a portion of these reserves will carry mine life to the year 2025 (?).

Legal Description: Portions of the Sections 18, 19, 20 and 29, 30, 31, and 32 in T36S, R13W, Sections 25, 26, 27, 28, 34, 35, and 36 in T36S, R14W, and Sections 1, 2 and 3, T37S, R14W, Salt Lake Base Meridian, Iron County, Utah

Mineral(s) to be Mined: Iron Ore

Mining Methods: Surface Mine - standard open pit mining techniques

Acres to be Disturbed: 417 acres

Present Land Use: Mining, native rangeland, some local real estate development, and limited livestock grazing.

Postmining Land Use: same as above

Variances from Reclamation Standards (Rule R647) Granted: Previously approved USX Properties (M/021/008 & M/021/003) and previously approved CF&I Properties (M/021/005): Rule M-10(3, 13, & 12 - Impoundments, Dams & Revegetation) for the open pits, M-10(7, Roads & Pads), M-10(8 - Drainages), M-10(12 - Revegetation), and M-10(14 - Soils); previously approved UII properties (M/021/001): M-10(5, 7, 8, 12 - Highwalls, Roads & Pads, Drainages, and Revegetation); New areas under this permit revision (Tip Top, Excelsior/Chesapeake Extension, Burke Road) - R647-4-107.5 (Topsoil Salvaging), R647-4-111.1.13 (Hole Plugging), R647-4-111.6 (Slopes), R647-4-111.8 (Roads & Pads), R647-4-111.13 (Revegetation)

Mitigation: Geneva has agreed to reclaim approximately 7 acres of pre-law disturbance as mitigation for approximately 3.5 acres of angle-of-repose waste rock dumps associated with the small Tip Top and Chesapeake/Excelsior pit areas. The mitigation areas will be reclaimed to meet all current reclamation standards.

Soils and Geology:

Soil Description: The following soils have been surveyed in the mine plan area: LMC - Lucero, Gravelly Sandy Loam (2 - 8 % slopes), CJG - Ironco/Delson Extremely Cobbly Loam (25 - 60% slopes), M1- Pre-Act Disturbed Areas, M2 - Overturned Disturbed Mining Areas. A detailed description of these soil types is available in section 8.0, pages 20-22 of the revised permit application.

pH: 7.19 - 8.22

Special Handling Problems: none anticipated

Geology Description: The Iron Springs and Iron Mountain mining districts are located in the Eastern Great Basin and Range Province in southwestern Utah, approximately 20 miles west of the Markagunt Plateau and Hurricane fault scarp, which forms the western boundary of the Colorado Plateau province. Three quartz monzonite porphyry intrusive (plutons) are exposed at the surface and form the dominant topographic features of the district (Three Peaks, Granite Mountain, and Iron Mountain). Jurrasic and Cretaceous sedimentary rocks flank the intrusive bodies. The margins of the Iron Mountain and Granite Mountain intrusives are complexly folded and faulted. The iron ore was derived from the plutons and deposited as either hematite-magnetite replacement bodies in the Homestake Limestone Member of the Middle Jurassic Carmel Formation near the igneous contacts, or as magnetite veins in extension joints within the plutons. The replacement ore deposits in the district are in Jurassic limestone peripheral to the quartz monzonite intrusive. Magnetite fissure veins and screens, or pods, of replaced limestone occur within the intrusive masses. The intrusive and associated ore bodies comprise a zone approximately 3 miles wide and 25 miles in length, trending in a northeasterly direction.

Hydrology:

Ground Water Description: The Quaternary and Cretaceous sediments comprise the principle groundwater reservoir in the Iron Mountain mining district. Groundwater exists in the deeper Jurassic rock and along the iron ore contacts primarily in fracture planes (joints/faults) and along bedding planes. Flow is principally controlled by the fracture pattern systems, fault trends and attitude (strike and dip) of the bedrock. Groundwater occurs in valley fills under both confined and unconfined conditions in the local mining district. No flowing wells exist within or immediately adjacent to areas subject to reclamation. Two deep non-flowing well exist in the Iron Mountain/Comstock area. The wells were drilled to depths of 130 and 340 feet respectively. Both were historically used for culinary purposes, but have long since been closed and are no longer usable. Culinary water is hauled onsite from an offsite source and process water for ore washing is obtained onsite from the open pits. A localized lowering of the piezometric surface of the ground water table is anticipated in the immediate vicinity of the pits. Projected impacts to the groundwater flow gradients across the pits show variability from zero to high impacts in the immediate pit area, but returning to near normal within

1/4 mile down gradient. Groundwater quality is characterized as very hard with moderately high conductivity, alkalinity, and total dissolved solids. Nitrate and metals concentrations, including iron are low. Based upon the results of information obtained to date, no degradation of water quality is anticipated in or around the Comstock/Mtn. Lion pit (principal active mining area) during or following cessation of mining operations.

Surface Water Description: No perennial streams originate or flow through the mine area. All drainages within the mining area are ephemeral. Most of the ephemeral drainages that have been affected by mining operations (because of overburden fill or open pit mining within these drainages), were affected pre-law. Where possible, ephemeral drainages have been avoided, or when encountered, culverted to minimize drainage problems. Three springs have been identified in the general area (Raddatz Spring, Oak Spring and Crystal Spring). All flow sporadically in response to seasonal recharge. The springs have no culinary or mining usage. All are used periodically for livestock watering. Permanent ponds exist in the bottom of the Blowout, Duncan, Blackhawk, Burke and Pinto pits, originating from surface runoff and groundwater inflow. The Comstock and Mtn. Lion pits do not have permanent ponds due to ongoing mining activities, but do experience seepage which is pumped periodically from the pit. Due to the high permeability of the predominantly alluvial soils, fractured bedrock, low annual precipitation and high evapotranspiration rates of the area, significant erosional features are not evidenced.

Water Monitoring Plan: Geneva is presently in compliance with its approved UPDES permit for discharges from active pits. An EPA Stormwater Permit (American Mining Congress group permit) application is presently being processed by EPA and Utah State Division of Water Quality (DWQ). A Groundwater Discharge Permit application has been filed with DWQ which is scheduled for review under their existing facilities prioritization system. Additional monitoring may be required as a result of DWQ's processing and approval of these permit applications. Once approved by DWQ, these permits and pertinent monitoring requirements will be incorporated into Geneva's approved mining and reclamation plan.

Ecology:

Vegetation Type(s); Dominant Species: Pinion Pine, Utah Juniper, Curl Leaf Mountain Mahogany, Cliffrose, Antelope Bitterbrush, Fernbush, Big Sagebrush, Rubber Rabbitbrush, Oakbrush Sumac, Crested Wheatgrass, Intermediate Wheatgrass, Indian Ricegrass, Squirreltail, Purple Three Awn, Palmer Penstamon, Yellow Sweetclover.

Percent Surrounding Vegetative Cover: 54% total vegetative cover which reflects a pinion and juniper community canopy cover. 40% total vegetative cover is more reflective of the adjacent shrub and grass communities.

Wildlife Concerns: Threatened or endangered species or critical habitats have not been identified at the mine site. Temporary displacement of native wildlife species from those areas that are presently

being mined and subject to subsequent reclamation. Permanent and/or partial displacement of select wildlife species from those mine areas that are not subject to reclamation (eg., prelaw flooded pits and angle of repose waste dumps, etc.). The DWR has determined that there is no significant effect from ongoing mining operations on deer that may winter in the area.

Surface Facilities: Burke, Black Hawk, Blowout, Duncan, Mtn. Lion/Comstock, Tip Top, Excellsior/Chesapeake pits, associated waste dumps, Mtn. Lion/Comstock loadout and railroad spur, maintenance shop, ore processing/crushing facilities, ore stockpiles, topsoil stockpiles, railroad spur/siding, numerous access and haul roads, power poles, transformers, substations and transmission lines.

Mining and Reclamation Plan Summary: . . . .

During Operations:

Standard open pit mining operations (drilling and blasting) will be conducted to mine iron ore from existing pits (principally the Mountain Lion/Comstock pits) over the next five year term. Existing waste rock dumps will be expanded to accommodate waste material/overburden mined from the pits. Mined ore will be loaded into haul trucks and taken to the Mtn. Lion/Comstock ore handling and loadout facilities area for processing and eventual railroad shipment to Geneva's steel manufacturing facilities in Orem, Utah. A maximum of 3-4 acres per year are anticipated to be disturbed over the life of the operation.

After Operations:

M/021/008 & M/021/003 (Original USX Properties) - Pits: open mined out pits will be left open, except for the Yellow Jacket pit, which will be partially filled with overburden material. A 6-foot high safety berm will be constructed around all pit perimeters for safety purposes. Some of the lower bench levels will be smoothed out, topsoiled and seeded. The lower level of the pit will form a natural lake. Haul road access to the pits will be blocked, and roads not subject to post-mine use will be scarified and reclaimed. Waste dump crests will be rounded to conform with surrounding topography. Dump tops will be contour scarified and reseeded. Existing topsoil substitutes may be used where topsoil salvage is not possible or practicable.

M/021/005 (Original CF&I Properties) - Pits: open pits will be left open. Fences or berms will be placed along remaining accessible highwalls. Pit benches will be broadcast seeded where accessible. Lean ore and overburden dumps: Dump tops will be graded and scarified and reseeded. Fines generated from mining will be amended and used as a growing medium as a topsoil replacement. Haul roads and compacted surfaces will also be ripped and seeded.

M/021/001 (Original Utah International, Inc. Properties) - Waste Dumps: rounding of dump crests to 2 to 1 angles. Scarification on dump crests and across portions of accessible dump slopes. All areas to be reseeded. No soil amendments required. Haul roads will be scarified and graded to

contour, then reseeded. Barriers will be constructed to prevent unauthorized vehicular access after mining. All surface debris will be removed from the site.

M/021/008 - Excelsior/Chesapeake, Tip Top and Burke Pit Road (new areas under revised permit) - The FAA/Ore Haul Road leading to the Tip Top pit and the Burke Pit Road were pre-law disturbances. No topsoil was salvaged. The Burke Pit Road will be scarified, bermed on the downslope shoulder, reseeded and mulched. The FAA/Ore Haul Road will have a post-mine use, but the cut and fill slopes will be reseeded and mulched. The Tip Top and Excelsior areas will be retopsoiled with a suitable topsoil from prior permitted areas (Anthill Borrow Area or Blowout Topsoil Borrow Area), reseeded and mulched. All roads without an approved post-mine use and compacted areas will be ripped, and scarified, fertilized, seeded and mulched. Pit/Dumps: Pit highwalls will be reduced by blasting to approximately a 1:1 slope to match adjacent native slope angles. Available waste rock dump materials will be pushed back into the Excelsior Pit. Dump tops will be contoured, scarified and hydroseeded. Fine material from the crest of the slope will be pushed onto the dump slopes. These areas will be hydroseeded (with fertilizer, mulch and tackifier).

Surety:

Amount: $990,000 (2000 $'s)
Form: Surety Bond
Renewable Term: 5 year

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