

# Union Mine Update

## February 2005



### EL DORADO COUNTY



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#### Union Mine Disposal Site Acreage:

The County of El Dorado owns 271.44 acres at the Union Mine Disposal Site. The County also has a use permit for an additional 110 acres of Bureau of Land Management (BLM) property directly to Union Mine.

#### Permits:

The Union Mine Disposal Site is authorized by a series of permits including Waste Discharge Requirement (WDR) Order No. 98-238; Standard Provisions and Reporting Requirements of California Title 27 of the California Code of Regulations (CCR) and the Federal 40 Code of Federal Regulations (CFR), Part 258; California and Federal General Industrial Storm Water Discharge Permit (NPDES) identification number 5A09S000443; California Solid Waste Facilities No. 09-AA-0003 overseen by the California Integrated Waste Management Board and Placer County Environmental Health; Special Use Permit No.S91-28; California Environmental Impact Report (EIR) filed with the State Clearing House (SCH#90021154); and Air Quality Permit No. 10-625-01 for the methane flare and landfill gas collection system.

#### Brief History:

The Union Mine area was used as an illegal dump site since post WW II. The original 217-acre Union Mine Disposal Site property defaulted to the County in 1962 via the bankruptcy of the former El Dorado Gold Mine Co. On May 27, 1964, the Union Mine Disposal Site property was officially permitted as a sanitary landfill and burn dump and is the last remaining permitted landfill in El Dorado County. .

In 1989, the Central Valley Regional Water Quality Board (CVRWQCB) issued El Dorado County a "Cease & Desist Order" to cease use of the unlined septage ponds at the Union Mine Disposal Site. During this same time period, the California Department of Toxic Substances Control Division (DTSC) issued El Dorado County an "Order" to mitigate a former "Toxic Pit" resulting from the build up of naturally occurring arsenio pyrite found in the area from the previous gold mine operations. Both conditions have since been mitigated and the Orders have been rescinded.

On February 27, 1992, the "*Union Mine Disposal Site Expansion and Closure Project*" was approved. The County has since expended over \$15 million dollars in capital improvements at the Union Mine Disposal Site including installation of an EID fire hydrant and potable water system down from Hwy 49; realigned Union Mine Road; re-routed a drainage course to prevent run off into the expansion area; constructed a new landfill cell; constructed a methane gas recovery and flare system and constructed a leachate and septage treatment facility.

The County expends over \$200,000/year monitoring 16 groundwater wells, 18 methane wells, 10 surface discharge points, 4 storm water discharge points and 4 lysimeters. The water quality data is compiled and reported quarterly to the CVRQCB, and air source testing to the Air Quality Management District and California Air Resources Board. County contractors and/or professional staff also conduct biological monitoring of Martinez Creek that is directly adjacent to Union Mine Disposal Site at an additional cost of \$20,000/year. Union Mine Disposal Site is routinely and randomly inspected by the California Department of Occupational Health and Safety; California Integrated Waste Management Board (CIWMB) and their affiliate, the Local Enforcement Agency (LEA), Placer County Environmental Health; California Fish and Game; California Division of Dams and Safety, Federal Environmental Protection Agency and the CVRWQCB.

### **Export of El Dorado County Septage/MOU with Sacramento County:**

Following the closure of the unlined septage ponds at Union Mine Disposal Site in 1989, Sacramento County authorized El Dorado County septage to be disposed into their treatment works. That authority was underwritten by a Memorandum of Understanding (MOU) between the governing bodies of El Dorado County and Sacramento County. The MOU remains in effect and prescribes that El Dorado County septage shall no longer (with the exception of emergency conditions) be hauled to the Sacramento County Regional Treatment works after April 1, 1996. The Union Mine Disposal Site Septage and Leachate Treatment Facility opened on that date.

### **Current Liquid Waste Capacity of Union Mine Disposal Site:**

As of February 1, 2005, we have nearly 1,000,000 gallons of wastewater balance capacity for liquid waste and do not anticipate a plant closure. Doug Veerkamp General Engineering, Inc, has re-built and expanded the northern spray field. In addition, our consultants, contract operator and engineers are currently performing an evaluation of past and current practices and recommending new procedures so as to maintain 100% regulatory compliance and to reduce on-going costs. Lastly, our staff and consultants are updating our EID discharge permit so as to enable a secondary discharge of our treated wastewater to the El Dorado Irrigation District force sewer main near the town of El Dorado.

### **Update of Existing Central Valley Regional Water Quality Board Permit and Joint Technical Document:**

As required by law, the County is required to update our Waste Discharge Requirements (“WDR’s” otherwise referred to as our “Water Board Permit”) by the preparation and submittal of a Report of Waste Discharge (ROWD) every 5 years. The County has retained a team of solid waste, liquid waste, geotechnical, architectural, landfill and air quality experts including NJF Engineering, HDR Engineering, Inc., Murray & Downs Architects, Gillis & Associates Architects, CH2M Hill Engineering Inc, Julia R. Leung Consulting Engineer, Carlton Engineering, Inc., Bollard and Brennan, Inc., CD Charrette Consulting, Law Offices of Thomas M. Bruen, and Field Solutions, Inc. to update our current and proposed new permit parameters. For on-going maintenance activities, the County also has contracts with local contractors Doug Veerkamp General Engineering, Inc. and Joe Vinici, Inc.

### **Chemical Toilet Waste/Compliance With Liquid Waste Ordinance:**

Because of new Clean Water Act and Basin Plan requirements, the City of Placerville can no longer accept chemical toilet waste at their wastewater facility. These same new water quality limitations also impact the Union Mine Disposal Site permit. In an attempt to accommodate receiving chemical toilet waste at Union Mine Disposal Site, we are also revising our ROWD to potentially accept chemical toilet waste. Recent analytical water quality testing of our treated septic tank effluent indicates that constituents found in chemical toilet waste have already been detected in the Union Mine treated effluent. As a result, the County will be implementing new load screening and random testing of all liquid waste entering the Union Mine Disposal Site. To implement this program, our Environmental Health Division will be working with the permitted haulers to identify acceptable chemical toilet additives and insure compliance with the provisions of El Dorado County Ordinance No. 4414 "Liquid Waste (Septage) Management" which has been law since March 19, 1996. This law requires all haulers to manifest their loads and to submit monthly reports to the County. For further information regarding compliance with our local Ordinance, please contact our Supervising Environmental Health Specialist, Fred Sanford, at 530.621.7614.

### **El Dorado Rod & Gun Club:**

Under the authority of Special Use Permit No. 77-82, the County has a Concessionaire's Agreement with the 350-member El Dorado Rod & Gun Club to utilize the southern portion of the Union Mine Disposal Site property. The El Dorado County Sheriff's Department currently uses the El Dorado Rod & Gun Club site for pistol training.

### **Pending New Union Mine Disposal Site Projects:**

In a partnership with the Sheriff's Department and potential grants from the Department of Homeland Security, Environmental Management is permitting and proposing to build a \$2.7 million indoor 100 yard and 25 yard firing range on the east side of the County's property. The entire indoor gun range property will be fenced.

In cooperation with our energy gas rights partner, Montauk Energy Capital of Pittsburgh, PA and with methane fueled micro turbines manufactured by Ingersoll Rand, the Union Mine Disposal Site "methane to electric power project" will go on line during the Summer of 2005. The electric power project will save the County as much as approximately \$10,000/month in PG&E charges currently paid to run the four (4) large motors aerating the septage and two (2) centrifuges used to process sludge.

### **Insurance Requirements:**

All contractors, engineers and haulers dumping or performing work at Union Mine Disposal Site shall maintain at least \$1 million of general and vehicle liability coverage and name the County as an additional insured. Design engineers and architects performing work at Union Mine Disposal Site on behalf of the County must also have Professional Liability and Environmental Impairment Insurance coverage.

### **Digital “Real Time: Security Camera System:**

The County, through SBC, Inc. and ADT, Inc., has installed a “real time” digital surveillance of activities and discharges at Union Mine Disposal Site. The Department will retain the surveillance images for at least 6 months to insure the security, integrity and safety of employees and functions at Union Mine Disposal Site.

### **Current and Future Funding of the Union Mine Disposal Site Septage Facility:**

Capital improvements and operations at Union Mine Disposal Site have always been on a “pay as you go system” and there is no debt service. There are currently 26,684 parcels in the County utilizing a septic system and each parcel is assessed a flat \$15/year fee collected through the ad valorem process. In addition, the County charges each permitted hauler \$0.01024/lb (\$0.089/gallon) to dispose of septage at Union Mine Disposal Site. The parcel fee will remain flat and we do not anticipate raising the disposal fees for haulers in excess of the California CPI.

### **Further Information:**

For additional information regarding any of the activities, contracts, permit processes and issues raised above, please contact the Union Mine Disposal Site supervisor, Jeff Rusert, at 530.621.6654; our Supervising Environmental Health Specialist, Fred Sanford at 530.621.7614; our Manager of Environmental Health, Greg Stanton at 530.621.6658 our Deputy Director, Gerri Silva, at 530.621.6653 or Jon Morgan at 530.621.5360.

cc. Board of Supervisors  
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Jeff Neves, Sheriff, El Dorado County  
Fred Kollar, Undersheriff El Dorado County  
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