

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. R4-2011-xxxx

REVISED WASTE DISCHARGE REQUIREMENTS
For
UNITED ROCK PRODUCTS CORPORATION
United Rock Products Pit No. 2
(File No. 04-002)

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The California Regional Water Quality Control Board, Los Angeles Region (Regional Board), finds:

1. United Rock Products Corporation (Discharger), a subsidiary of Sully Miller Contracting Company, owns and operates the United Rock Products Pit No. 2, also referred to as URP Pit No. 2 or Quarry No. 2 (Site), a construction aggregate mining pit at 1245 E. Arrow Highway, Irwindale, California. The Site is generally bounded on the north by the Buena Vista Flood Control Channel, on the south by Arrow Highway, and on the east by Avenida Barbosa (Figure 1). The center of the Site is located at approximately latitude 34°06'56"N and longitude 117°59'23"W.
2. The Discharger also operates a similar aggregate mining pit (URP Pit No. 3) to the north of the Site and a rock plant (Rock Plant) to the east of the Site (Figure 2). Aggregates extracted from the Site and URP Pit No. 3 are processed at the Rock Plant. Mining wastes generated at the Rock Plant (native geological materials consisting of fine sand, silt, and clay, or nodurable rock material) have been backfilled at the mining pits.
3. The Site includes approximately 134 acres of land and has been mined for sand and gravel by the Discharger and its predecessors since the early 1900s. The extraction of aggregates below groundwater table has created a lake of exposed groundwater at the Site. The average depth of the pit is approximately 275 feet below ground surface. In accordance with a Conditional Use Permit (CUP No. 5-04) granted by the City of Irwindale (City) on August 9, 2004, the Site may be mined to either a maximum depth of 410 feet or until December 31, 2020, whichever occurs first.
4. The Site is subject to reclamation as required by the State Surface Mining and Reclamation Act of 1975 (SMARA) (Public Resources Code § 2710 et seq.) and the City's Surface Mining Ordinance. In accordance with a Reclamation Plan approved by the City (dated July 8, 2004), the easterly one-third of the Site will be backfilled to street level at approximately 380 feet above mean sea level (amsl), the westerly one-third will be filled to approximately 75 feet below street grade (337 amsl), which is approximately ten feet above the historic high water elevation, and the remaining one-third will be filled to approximately 37 feet below street level (343 amsl). To meet the reclamation requirements, the Discharger has applied to discharge inert solid wastes at the Site concurrently with aggregate mine operations.
5. This Regional Board adopted Order Number R4-2004-0118 on August 5, 2004, that includes waste discharge requirements (WDRs) for the discharge of inert mining wastes at the Site. The WDRs limited materials that may be discharged at the Site to inert mining wastes generated by the Discharger's aggregate mining activities at or in the vicinity of the Site. The

August 30, 2011

permitted discharge methods include backfilling waste material from the Rock Plant to the Site by means of trucking or sluicing. The sluicing process involves mixing the waste materials (primarily clay and silt) with groundwater that has been used in the mining process and pumping the mixture to various locations at the Site. No chemicals are permitted to be added in either the mining or the sluicing processes.

6. On March 5, 2009, the Regional Board adopted Order No. R4-2009-0039 that amended R4-2004-0118 to allow the discharge of up to 1,000,000 cubic yards of inert broken concrete materials at the Site for the construction of stability buttresses and similar safety features.
7. On August 1, 2011, the Discharger submitted a revised Report of Waste Discharge (ROWD) to the Regional Board and requested that the WDRs be revised to allow the discharge of other inert wastes that are allowed under Title 14 of California Code of Regulations (14 CCR), Chapter 3, Article 5.95, Section 17388 for the operations of an Inert Debris Engineered Fill Operation (IDEFO)¹. The Discharger estimates that approximately 59.61 million tons of materials are needed to fill the Site as proposed.
8. Section 20230(a) of title 27, California Code of Regulations (27 CCR), provides that "*Inert waste is that subset of solid waste that does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste.*"
9. Section 13050(q)(1) of the California Water Code (CWC) provides that, in part, "*'Mining waste' means all solid, semisolid, and liquid waste materials from the extraction, beneficiation, and processing of ores and minerals.*"
10. The Discharger has developed a load checking program, as included in the revised ROWD, to prevent unauthorized wastes to be discharged at the Site. The Regional Board Executive Office (Executive Officer) may require the Discharger to submit updated load checking programs in response to changes of Site conditions or applicable state and federal regulations.
11. 27 CCR section 20230(c) of provides that the Regional Board "can prescribe individual or general WDRs for discharges of inert wastes." CWC section 13263 (e) provides that all WDRs shall be reviewed periodically and, upon such review, may be revised by the Regional Board to comply with changing state or federal laws, regulations, policies, or guidelines.

¹ 14 CCR, Chapter 3, Article 5.95, Section 17388 (l) defines that "*Inert Debris Engineered Fill Operation*" means a disposal activity exceeding one year in duration in which fully cured asphalt, uncontaminated concrete (including steel reinforcing rods embedded in the concrete), brick, ceramics, clay and clay products, which may be mixed with rock and soil, are spread on land in lifts and compacted under controlled conditions to achieve a uniform and dense mass which is capable of supporting structural loading as necessary, and having other characteristics appropriate for an end use approved by all governmental agencies having jurisdiction (e.g., roads, building sites, or other improvements) where an engineered fill is required to facilitate productive use of the land. The engineered fill shall be constructed and compacted in accordance with all applicable laws and ordinances and shall be certified by a Civil Engineer, Certified Engineering Geologist, or similar professional licensed by the State of California.

12. The Site is located approximately one-half mile to the west of the Santa Fe Dam and the San Gabriel River channel. The area behind the dam and the unlined river channel are used for spreading groundwater for recharge purposes.
13. The Site overlies a major drinking water aquifer in the Main San Gabriel Basin in the Los Angeles-San Gabriel Hydrologic Area. Aquifers within the basin are comprised primarily of coarse sand and gravel. Recent groundwater level at the Site varies between 200 to 240 feet amsl, depending on the season of the year and the nearby groundwater recharge activities. The direction of groundwater flow at the Site is generally to the southwest and south and groundwater flow velocities have been measured at 6.82 to 7.20 feet/day at the vicinity of the Site.
14. Groundwater monitoring at the Site started in 2005 as required by Order No. R4-2004-0118. The current groundwater monitoring network of the Site includes a background monitoring well (IRW-1) located at the Rock Plant, two discrete sampling locations at the lake of exposed groundwater at the Site, and two groundwater monitoring wells (IRW-1A and IRW-1B) at the Nu-Way Arrow Landfill to the southeast of the Site that are used to obtain groundwater level information for the calculation of groundwater gradient and flow direction. The quality of the groundwater at the Site, as reported in the most recent self monitoring report (dated July 14, 2011) submitted to the Regional Board, is summarized as follow:

Parameter	Units	IRW-1(Background)	Lake*
Total dissolved solids	mg/L	140	145.
Chloride	mg/L	8.48	18.3
Sulfate	mg/L	20.9	30.1
Nitrate (as NO ₃)	mg/L	4.95	0.77
Boron	mg/L	0.112	0.103
pH	pH unit	7.01	8.16
Volatile Organics	ug/L	Not Detected	Not Detected

* Concentrations are averages of two samples taken from the lake of exposed groundwater on June 2, 2011.

15. The quality of water used in the sluicing of mining wastes (local groundwater used in the mining process), is as follow:

Parameter	Units	Average concentration*
Total dissolved solids	mg/L	187.0
Sulfate	mg/L	36.9
Chloride	mg/L	18.6
Nitrate (as NO ₃)	mg/L	0.77
Boron	mg/L	0.225
pH	pH unit	8.1
Pesticides and PCBs	ug/L	Not Detected

* Based on three sample taken in 2005. No sluicing of wastes occurred at the Site since the December 2005.

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16. Pursuant to section 402 (p) of the Clean Water Act (33 USC §1342(p)) and title 40 of the Code of Federal Regulations (40 CFR) parts 122, 123, and 124, the California State Water Resources Control Board (State Board) adopted a National Pollutant Discharge Elimination System (NPDES) General Permit to regulate storm water discharges associated with industrial activities in California (State Board Order 97-03-DWQ). Storm water runoff from the Rock Plant, URP Pit No. 3, and the Site is currently regulated under the general NPDES permit (WDID No. 4 19S000779, enrolled on March 20, 1992). The Discharger is implementing a Storm Water Pollution Prevention Plan (SWPPP) as required by the general NPDES permit.
17. On June 13, 1994, this Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). The Basin Plan (including its subsequent amendments) designates the following beneficial uses for groundwater within the Main San Gabriel Basin: municipal and domestic supply, agricultural supply, industrial process supply, and industrial service supply. The requirements in this Order, as they are met, are in conformance with the goals of the Basin Plan.
18. On December 20, 2005, the City passed Resolution No. 2005-89-2106 that adopted technical guidelines for the backfilling of open-pit mines within the City, including: Guidelines for Stability Analyses of Open-pit Mine Slopes, Guidelines for Drainage and Erosion Control for Open-pit Mines, Guidelines for Underwater Backfilling of Open-Pit Mines, and Guidelines for Above-Water Backfilling of Open-Pit Mines. These guidelines are applicable to all aggregate mining operations in the City, including the Site.
19. On July 20, 2004, the City certified a Final Environmental Impact Report (SCH No. 2003101088) for the mining and reclamation of the Site under the California Environmental Quality Act (CEQA, Public Resource Code, Section 21000 et seq.). Revision of existing waste discharge requirements is exempt from CEQA in accordance with the California Water Code (CWC) Section 13389.

The Regional Board has notified the Discharger and interested agencies and persons of its intent to adopt revised WDRs for this disposal of waste at the Site, and has provided interested persons with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the tentative requirements.

Any person aggrieved by this action of the Regional Board may petition the State Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality/index.shtml or will be provided upon request.

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IT IS HEREBY ORDERED, that United Rock Products Corporation (Discharger) shall comply with the following:

A. Discharge Specifications

1. Wastes discharged at the Site shall be limited to inert wastes as defined in 27 CCR, section 20230(a), including but not limited to: native geological materials (such as clay, silt, gravel, etc.) generated by mining activities of the Discharger at the vicinity of the Site and materials that are acceptable at an Inert Debris Engineered Fill Operations as defined in Section 17381(l) of 14 CCR, including uncontaminated concrete, crushed glass, bricks, ceramics, clay and clay products, rock and soil, and fully cured asphalt. Asphalt material shall not be dumped into standing water nor shall it be placed below the highest anticipated groundwater elevation, which is estimated to be at 327 feet amsl at the Site.
2. Mining wastes generated from the Rock Plant may be sluiced to the Site. Water used in sluicing must be local groundwater that has been used in processing aggregate products. No chemicals or any other additives, other than native geological materials and water, shall be added in the mining or sluicing processes. Discharge of wastes by sluicing shall be limited to the lake of exposed groundwater only. Sluicing shall be ceased once the Site is filled to above groundwater table.
3. Water used in the sluicing process shall not contain any pollutants in concentrations exceeding the Maximum Contaminant Levels (MCLs) for drinking water adopted by the California Department of Public Health pursuant to the California Safe Drinking Water Act (Health and Safety Code, Section 116275 et. seq.).
4. The Discharger shall implement a load checking program and take all necessary measures to prevent unauthorized wastes to be disposal of at the Site.
5. The Discharger shall remove and relocate to a legal point of disposal any wastes that are discharged in violation of these requirements. For the purpose of these requirements, a legal point of disposal is defined as one for which WDRs have been established by a California regional water quality control board, and is in full compliance therewith. In the event that the Discharger opts for a legal point of disposal outside the State of California, the legal point of disposal means a facility that is lawfully permitted under applicable state and federal laws to receive the type of waste improperly disposed of at the Site.
6. The Discharger shall continue implementing the Stormwater Pollution Prevention Program (SWPPP) and Storm Water Monitoring Program as required by the General National Pollutant Discharge Elimination System (NPDES) Storm Water Permit at the Site, including all good housekeeping and other best management practices (BMPs).

B. Prohibitions

1. No hazardous wastes, designated wastes, tires, or liquid wastes other than water used in sluicing of mining wastes, shall be deposited at the Site.

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2. Non-hazardous solid wastes (decomposable organic refuse such as, but not necessarily limited to, ordinary household and commercial refuse, tin cans, metals, paper and paper products, plasterboard, cloth and clothing, wood and wood products, lawn clippings, sod, shrubbery, hair, hide, bones, dead animals, roofing paper, tar paper, unquenched ashes mixed with refuse, market refuse, garbage, etc.) shall not be deposited at the Site.
3. Materials of a toxic nature such as insecticides and poisons shall not be deposited at the Site.
4. No radioactive material as determined by a regulatory agency with jurisdictional authority shall be deposited at the Site.
5. No asbestos or asbestos products shall be deposited at the Site.
6. Erosion of deposited materials by surface flow shall be prevented.
7. Neither the discharge nor any treatment of wastes shall cause pollution or nuisance.
8. No chemical additives shall be used at the Site unless such use is approved by the Executive Officer in advance.

C. Water Quality Protection Standards and Discharge Limits

1. In accordance with the Basin Plan, the following groundwater quality protection standards are established for the Site:

Parameter	Units	Water Quality Protection Standard*
Total dissolved solids	mg/L	450
Sulfate	mg/L	100
Chloride	mg/L	100
Nitrate (as NO ₃)	mg/l	45
Boron	mg/L	0.5
pH	pH unit	6.5 - 8.5

* Based on the water quality objectives in the Basin Plan for the western area of the Main San Gabriel Basin.

2. Groundwater protection standards for other inorganic and organic pollutants for the site are the MCLs adopted by the California Department of Public Health pursuant to the California Safe Drinking Water Act, or subsequent revisions.
3. Discharge limits of water used in sluicing wastes to the Site are set to the same levels as the water quality protection standards established in Sections C.1 and C.2 above. Concentrations of pollutants in the sluicing water, as analyzed for filtered samples, shall not exceed such limits.

4. The Regional Board may modify the water quality protection standards for the Site by revising the WDRs based on more recent and/or more complete groundwater monitoring data, changes in background water quality, or for any other valid reasons.
5. The points of compliance of groundwater protection standards for the Site shall be the downgradient groundwater monitoring points established in the attached Monitoring and Reporting Program (M&RP) No. CI 8799, which is incorporated herein by reference. The point of compliance for the discharge limits of sluicing water shall be at the end of sluicing pipeline.

D. Provisions

1. The Discharger shall implement the M&RP and revisions thereto, in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents or any unreasonable impairment of beneficial uses associated with (or caused by) discharges of waste at the Site.
2. The M&RP is subject to periodic revisions as warranted and approved by the Executive Officer. At any time, the Discharger may file a written request, including appropriate supporting documents, with the Executive Officer, proposing modifications to the M&RP. The Discharger shall implement any changes in the revised M&RP approved by the Executive Officer upon receipt of a signed copy of the revised M&RP.
3. The Discharger shall furnish, under penalty of perjury, technical or monitoring program reports in accordance with CWC section 13267. Failure or refusal to furnish these reports or falsifying any information provided therein renders the Discharger guilty of a misdemeanor and subject to the penalties stated in CWC section 13268. Monitoring reports shall be submitted in accordance with the specifications contained in the M&RP, as directed by the Executive Officer. Additionally, monitoring reports shall be prepared and signed by a registered civil engineer or registered geologist.
4. The Discharger shall use the statistical procedures contained in 27 CCR section 20415(e)(7), to determine if there is a statistically significant increase for any background indicator parameter. Upon approval of the Executive Officer, alternative statistical procedures may be used.
5. In the event that a statistically significant increase is observed for any background indicator parameter, the Discharger shall establish an evaluation program in accordance with 27 CCR section 20425, unless such a program has already been submitted.
6. If evaluation monitoring determines that there is a statistically significant increase of any background indicator parameter that is resulted by the discharge of waste at the Site, then the Discharger shall institute a corrective action monitoring program in accordance with 27 CCR Section 20430.

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7. The Discharger shall maintain copies of this Order at the Site so as to be available at all times to personnel operating the Site.
8. The Discharger shall file with this Regional Board a report of any material change or proposed change in the character, location, boundaries or quantity of this waste discharge at least 120 days prior to the date of such proposed change.
9. Within thirty (30) days of any change in name of operator or in control or ownership of land or waste disposal facilities owned or controlled by the Discharger, the Discharger shall:
 - a. Notify this Regional Board in writing of such a change; and
 - b. Notify the succeeding owner or operator by letter, a copy of which shall be filed with this Regional Board, of the existence of this Order.
10. Ninety (90) days prior to cessation of disposal operations at the Site, the Discharger shall submit a technical report to the Regional Board describing the methods and controls to be used to assure protection of the quality of receiving waters during final operations and with any proposed subsequent use of the land. Such methods and controls shall comply with the foregoing technical report and the WDRs. The report shall be prepared under the direct supervision of a California Professional Geologist or Professional Engineer.
11. This Regional Board considers the Discharger to have continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge or water applied to the Site during subsequent use of the land for other purposes.
12. These requirements do not exempt the Discharger from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraint on the disposal of wastes at the Site which may be contained in other statutes or required by other agencies.
13. In accordance with CWC section 13263(g), these requirements shall not create a vested right to continue to discharge and are subject to rescission or modification. All discharges of waste into the waters of the State are privileges, not rights.
14. The Discharger shall comply with all conditions of this Order and any additional conditions prescribed by the Regional Board in addenda thereto. Noncompliance with this Order constitutes a violation of the CWC and is grounds for:
 - a. enforcement action;
 - b. termination, revocation and re-issuance, or modification of this Order;
 - c. denial of a ROWD in application for new or revised WDRs; or
 - d. any combination of the foregoing.

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18. Failure to comply with the terms and conditions of this Order may result in imposition of civil liability against the Discharger by this Regional Board, either by the Board or judicially by the Superior Court, in accordance with CWC section 13350 et. seq. and/or referral to the Attorney General of the State of California for such legal action as may be deemed appropriate.
19. This Order includes the attached "Standard Provisions Applicable to Waste Discharge Requirements" (Attachment "W"), which is incorporated herein by references. If there is any conflict between provisions stated hereinbefore and the attached "Standard Provisions Applicable to Waste Discharge Requirements", those provisions attached hereinbefore prevail.
20. In accordance with CWC section 13263, these requirements are subject to periodic review and revision by this Regional Board.
21. The filing of a request by the Discharger for the modification, revocation and re-issuance, or termination of this Order or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
22. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
23. This Order becomes effective on the date of adoption by this Regional Board.

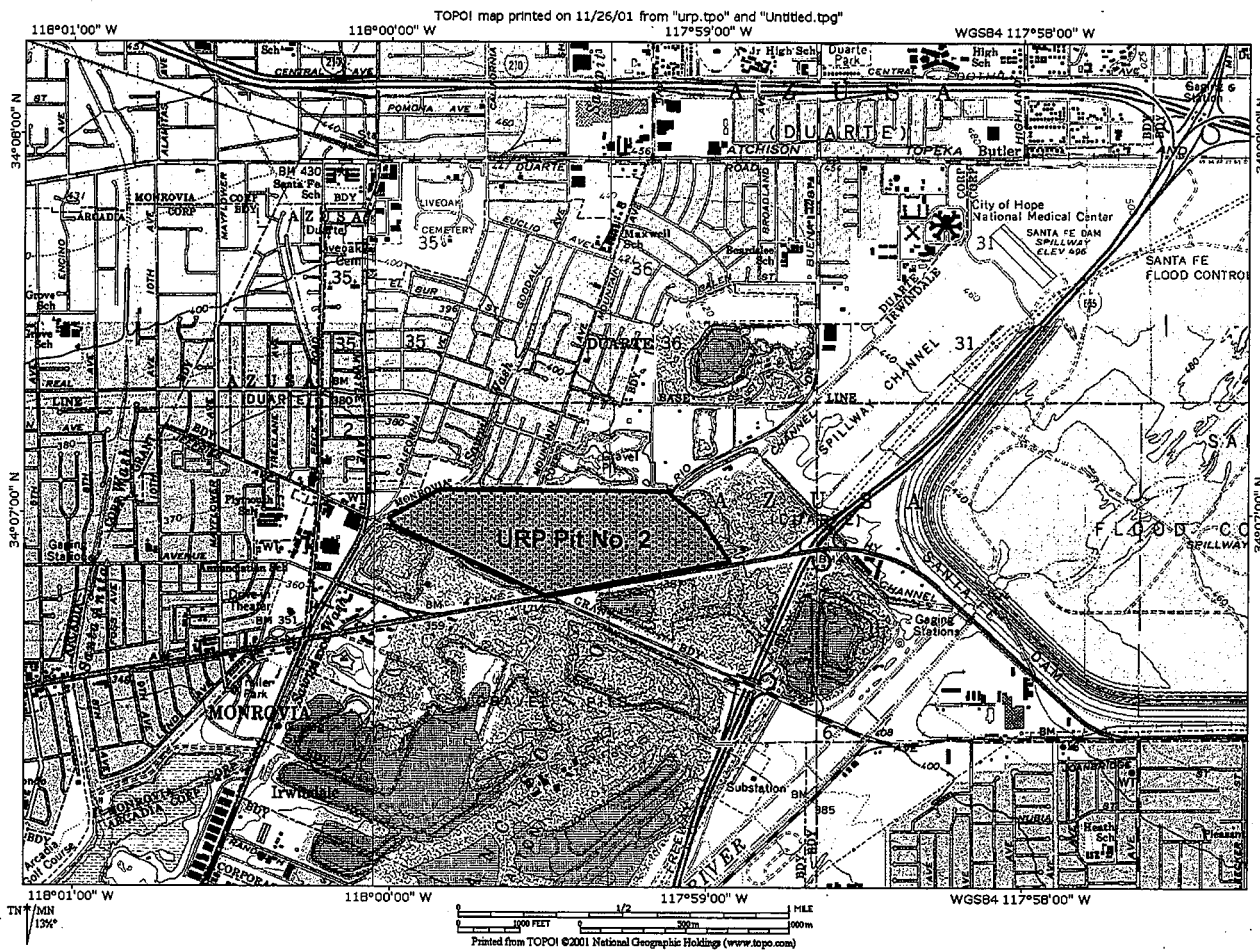
E. TERMINATION

1. Except for enforcement purposes, Regional Board Order No. R4-2004-0188, adopted on January 27, 1997, is hereby terminated.
2. Except for enforcement purposes, Regional Board Order No. R4-2009-0039, adopted on March 5, 2009, is hereby terminated.

I, Samuel Unger, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an order adopted by the California Regional Water Quality Control Board, Los Angeles Region on November 10, 2011.

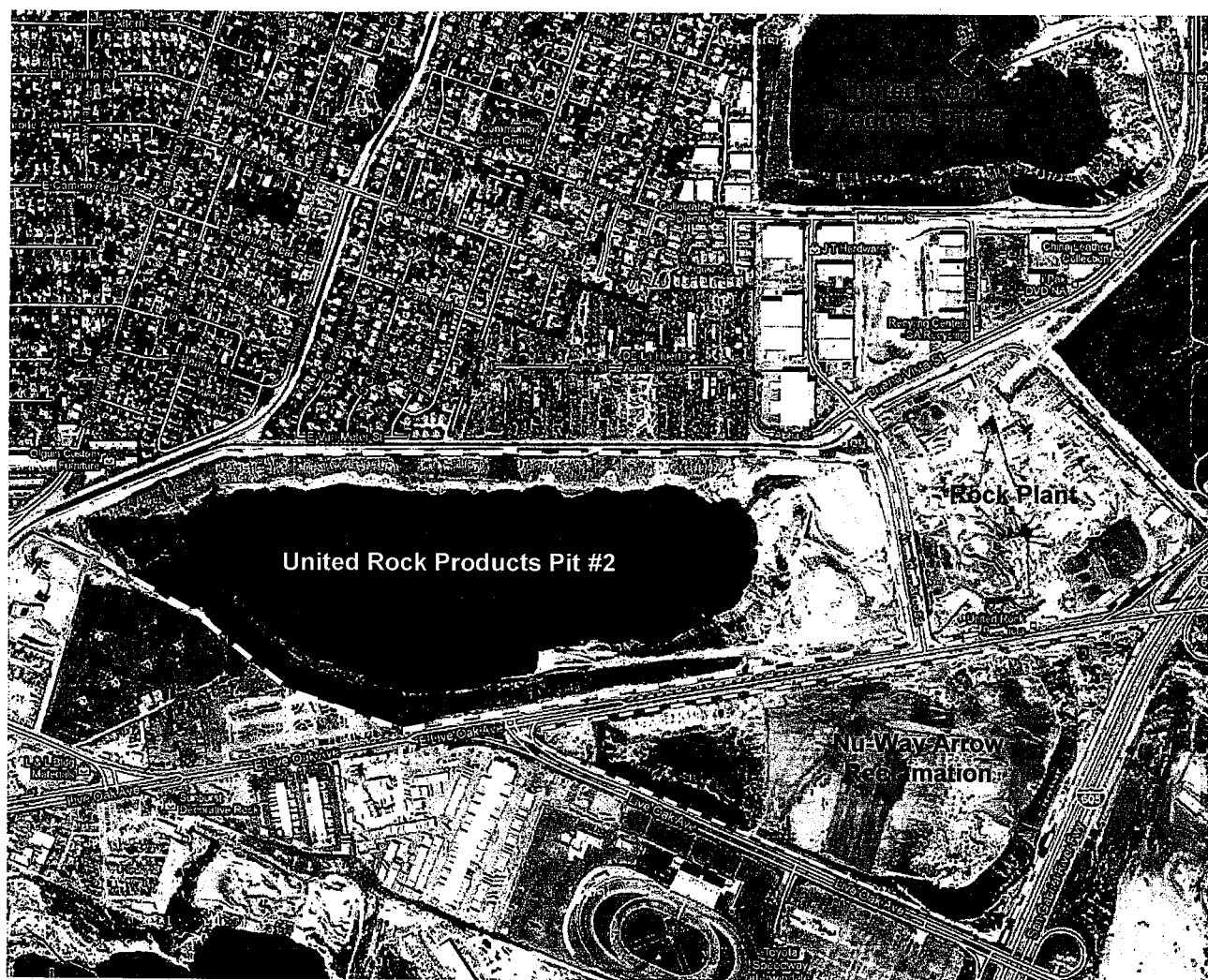
Samuel Unger, P.E.
Executive Officer

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Figure 1. Location Map



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Figure 2. Vicinity Map