



Questa Decommissioning and Demolition Project

Building Demolition and Cleanup Plan Phase 2 Activities - Tailing Facility Area



Prepared for:

Chevron Mining Inc.

116 Inverness Drive East, Suite 207
Englewood, CO 80112

Prepared by:

Tetra Tech, Inc.

350 Indiana Street, Suite 500
Golden, CO 80401

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Figure 3	Maintenance Yard Area - Affected Facilities
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LIST OF ACRONYMS

ACM	Asbestos-containing materials
BTEX	Benzene, toluene, ethylbenzene, xylene
BMP	Best management practices
C&D	Construction and demolition
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFC	chlorofluorocarbons
CFR	Code of Federal Regulations
CGP	Construction General Permit
CMI	Chevron Mining Inc.
EMNRD	New Mexico Energy, Minerals and Natural Resources Department
EPA	U.S. Environmental Protection Agency
HF	halogenated fluorocarbons
kg	kilogram
LOTOTO	lock-out/tag-out/test-out
mg	milligram
MMD	Mining and Minerals Division of EMNRD
MSDS	Material Safety Data Sheet
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
PCB	polychlorinated biphenyl
PCS	Petroleum-contaminated soils
PMLU	Post-mine land use
ppm	Parts per million
ROD	Record of Decision
SCID	State Construction Industries Division
SDS	Safety Data Sheet
SPCC	Spill Prevention Control and Countermeasures
SVOC	Semi-volatile organic compound
SWPPP	Stormwater Pollution Prevention Plan
TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total petroleum hydrocarbons
TSCA	Toxic Substances Control Act
TSDF	Treatment, storage, and disposal facility
TWS	Third-party waste stewardship
VOC	Volatile organic compound
WTP	Water Treatment Plant

1.0 INTRODUCTION

The Questa Mine is a former underground and open pit molybdenum mine and milling operation owned by Chevron Mining Inc. (CMI). The mine and mill facilities are located approximately 7 miles east of the Village of Questa, New Mexico (Questa), in Taos County along New Mexico Highway 38 and the adjacent Red River. The Questa Mine's Tailing Facility is located approximately 9 miles west of the mine, near Questa, NM. Conventional underground mining operations began in 1920 and continued until 1958. Underground mining resumed in 1982 and continued through approximately 2012. Open pit mining was conducted between 1965 and 1983. The locations of the major facility areas are shown on **Figure 1**. CMI announced the cessation of operations at the mine on June 2, 2014 and has initiated closure activities. Some of those activities are described in the Phase 1 Building Demolition and Cleanup Plan, submitted on August 28, 2014, and approved on August 29, 2014. Phase 1 activities will occur in the southern portion of the Mill Area, to allow for necessary Mill Site modifications to support construction of water treatment facilities and storm water management, and to prepare the remainder of the Mill Area for decommissioning.

This Phase 2 Building Demolition and Cleanup Plan (Phase 2 Plan) describes the planned surface facilities decommissioning and demolition at the Tailing Facility Area of the Questa Mine. The Plan is designed to meet the demolition requirements of CMI's Mining Act Permit (TA001RE), as revised by Permit Revision 96-1 (2001), issued by the New Mexico Energy, Minerals and Natural Resources Department (EMNRD), Mining and Minerals Division (MMD) under the New Mexico Mining Act (EMNRD 2002). The Plan is also designed to meet closure requirements specific to the removal of structures under DP-933, the Discharge Permit for the Tailing Disposal Facility issued by the New Mexico Environment Department (NMED, 2008). This Plan is not intended to replace or supersede the Closeout Plan(s) required under the Mining Act permit, nor is it intended to address final site reclamation of the Tailing Facility Area. Additionally, removal of the Tailing Pipeline and any remaining cleanup of spilled tailing, as required under Condition 45 of DP-933 and Condition 6 in Permit Revision 96-1 to Permit No. TA001RE, are beyond the scope of this Plan and will be addressed through separate actions.

This Phase 2 Plan is being submitted in accordance with the proposed updated reclamation schedule submitted to MMD on August 29, 2014. The scope and sequencing of future decommissioning phases targeting remaining structures not used to support remediation activities are still being evaluated and will be described in future building demolition and cleanup plan submittals .

This Plan identifies federal, state, and local regulatory requirements affecting decommissioning and demolition activities. Regulatory information is summarized in Section 2.0. The requirements are derived from existing Questa Mine regulatory documents and/or the underlying regulations. This Plan discusses the information listed below to guide decommissioning and demolition activities.

Section 2.0 Regulatory requirements

Section 3.0 Facility characterization

Section 4.0	Waste management
Section 5.0	Soil remediation
Section 6.0	Stormwater management
Section 7.0	Project schedule

1.1 Project Scope

1.1.1 Phase 2 Activities

The Phase 2 scope of demolition and decommissioning efforts, and the focus of this Phase 2 Plan, is limited to the removal of selected facilities within the Tailing Facility Maintenance Yard Area (**Figure 3**), located off of Lower Embargo Road, west of the Village of Questa and east of Dam No. 1B, and the IX Building (**Figure 4**), located south of Dam No. 4. As indicated on **Figure 3**, the Equipment Shop located within the Maintenance Yard Area is not currently scheduled for demolition. This building, a relatively new pre-engineered metal building with a dirt floor, will continue to be used to store equipment and supplies necessary to support ongoing closure activities and reclamation efforts associated with the Tailing Impoundments.

The affected facilities for this phase are identified on **Figures 3** and **4** and are listed below:

- Tailing Area Guard Shack/Admin/Dry Building - Maintenance Yard Area;
- Old Maintenance Shop ('The Burn Building') – Southern portion of the Maintenance Yard Area;
- One water tank and one former surfactant, or dust suppressant, storage tank near well house – Northern portion of the Maintenance Yard Area; and
- Ion Exchange Treatment (IX) Building – South of Dam No. 4

A septic tank and leachfield to the west of, and servicing only, the Guard Shack/Dry Building, will also be closed or removed as part of Phase 2 activities. The septic tank associated with the IX Building was previously closed in May 2014. One water tank, the wellhouse building and the pipeline flow monitoring shed in the Water Tanks and Wellhouse Area of the Maintenance Yard will be maintained to support ongoing activities. The western portion of the Maintenance Yard Area will continue to be used for a laydown yard and general staging/support area in support of ongoing closure activities and reclamation efforts associated with the Tailing Impoundments. This includes the maintenance of a diesel fuel AST, located within a containment area to the west of the Old Maintenance Shop (**Figure 3**).

As part of the planning and design phase of the facility decommissioning, preliminary inspections and asset inventories have been performed to assess the condition of existing CMI facilities and to identify equipment and other assets for potential salvage and resale. The results of the inventory work will be made available to MMD and NMED, as part of the Phase 2 Soil Sampling and Analysis Plan. More detailed facility inspections then will be conducted to identify wastes and materials that require special handling, characterization, and abatement or remediation prior

to demolition. The information will be used to identify abatement and disposal needs for individual facilities, such as the potential presence of hazardous materials, including asbestos, polychlorinated biphenyls (PCBs), reagents, explosives or fuels, chemicals, and universal wastes. Information regarding facility characterization, waste management, and soil remediation are discussed in Sections 3.0, 4.0, and 5.0, respectively.

Equipment determined to be salvageable assets will be removed for resale after completion of necessary waste removal or abatement activities. The subsequent step will be identification of utilities servicing buildings and implementation of lock-out/tag-out/try-out (LOTOTO) procedures to de-energize active utilities in the vicinity of these structures.

Decommissioning will be followed by demolition of the targeted surface facilities and minor site grading. To the extent possible, metal building cladding, structural steel, tankage, metal piping, and other metal scrap will be salvaged and recycled as scrap metal. Inert demolition debris consisting of masonry, lumber and miscellaneous building materials will be hauled off site to the Taos Municipal Landfill for disposal. Concrete floor slabs and foundations will be broken up and removed. After the removal or trimming of reinforcing steel, which will be recycled, concrete rubble will be transported and placed either in the open pit, within areas of the tailing impoundment where it can be used as fill material, or transported for off-site disposal at the Taos Municipal Landfill.

Minor site regrading will be conducted to restore surface drainage to pre-demolition conditions. Because the areas surrounding the demolished surface facilities may be disturbed or utilized as staging areas in the future, reclamation and revegetation of these areas will be conducted with the reclamation of the tailing impoundments in accordance with approved Closeout and Closure plans and CERCLA requirements. Tailing material, if relatively minor quantities are encountered, will be covered with a clean soil cover, or removed and placed in the Tailings Impoundments prior to closure, in accordance with the requirements of DP-933 and TA001RE. If larger quantities of tailing are encountered, an investigation as to the extent of tailing and the management of the tailing may be deferred to be addressed during final site reclamation, subject to other Closeout Plan or CERCLA requirements. If necessary, or if requested by the NMED or MMD, CMI will perform site investigations prior to final reclamation.

2.0 REGULATORY REQUIREMENTS

Regulatory authorizations for the Questa Mine include the Mining Act permit issued by MMD (TA001RE) and groundwater discharge permits issued by the New Mexico Environment Department (NMED). In addition, the U.S. Environmental Protection Agency (EPA) issued a Record of Decision (ROD) for cleanup of contamination at the mine, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), on December 20, 2010 (EPA 2010). The applicable mine compliance documents and other federal, state, and local requirements are briefly discussed below within the context of the planned Phase I decommissioning and demolition activities.

2.1 Existing Mine Compliance Documents

2.1.1 Mining Act Permit

Closure of the Questa Mine is regulated under Mining Act Permit TA001RE, issued by MMD. A closeout plan for the existing Tailing Facility was approved by the MMD in 2001. The designated PMLU for the Tailing Facility is wildlife habitat per Permit TA001RE, Revision 96-1. Section 4.4 of TA001RE, Revision 96-1, addresses the removal of the administration/change building and the IX water treatment plant.

2.1.2 Discharge Permit DP-933

Condition 43 of DP-933 requires, as part of the closure requirements, that CMI submit a structure removal plan. This Plan is intended to satisfy that requirement. This Plan also addresses the requirements of Condition 44 of DP-933 requiring the management of reagents, explosives, and other hazardous chemicals following cessation of operations.

2.1.3 Record of Decision

The ROD for the Questa Mine (CERCLIS ID NO. NMD002899094) was issued by EPA on December 20, 2010 and presents EPA's selected remedy for the site.. For site characterization and remedy selection purposes, the ROD divides the site into the following areas: Mill Area, Mine Site Area, Tailing Facility, Red River Riparian, South of Tailing Facility, and Eagle Rock Lake. Relevant portions of the ROD, specific to the Tailing Facility, have been considered as guidance or reference information in the development of this plan. Final design and implementation of the remedy will be subject to future agreements between EPA and CMI.

2.2 Federal Requirements

2.2.1 Stormwater

The regulatory authority for stormwater discharge permitting in New Mexico is EPA, Region 6. The NMED Surface Water Quality Bureau certifies the federal permits under Section 401 of the Clean Water Act and performs stormwater inspections on behalf of EPA and acts as a local point of contact to provide information to operators and other agencies regarding the regulatory program. If demolition activities will disturb more than 1 acre of land, coverage under EPA's 2012

Construction General Permit (CGP) for stormwater will be obtained. A Notice of Intent (NOI) for coverage under the CGP will be submitted to EPA 14 days prior to earth-disturbing activities. The site's existing stormwater pollution prevention plan (SWPPP) will be updated, implemented, and maintained on site. The SWPPP for the site will be updated as facility changes affect stormwater management activities. Specifics regarding stormwater management activities are described in Section 6.0 of this plan.

2.2.2 Spill Prevention, Control, and Countermeasure

The Spill Prevention, Control, and Countermeasure (SPCC) program regulating storage of oil also is administered by EPA. An SPCC plan to control spills will be developed if there is above-ground storage capacity greater than 1,320 gallons for storage containers exceeding 55 gallons on site. The site's SPCC plan will be updated as storage facilities are removed and/or temporary on-site storage containers are added to support demolition activities.

2.3 State or Local Requirements

2.3.1 Air

An asbestos notification form under the National Emission Standards for Hazardous Air Pollutants (NESHAP) will be submitted to the NMED Air Quality Bureau as required. Asbestos surveys will be performed by a certified asbestos inspector, and the NESHAP notification form will be filed 10 working days prior to the start of asbestos removal.

Dust control measures will be implemented to minimize generation of fugitive emissions and the potential for off-site transport of dust.

2.3.2 Demolition

A building demolition permit will be obtained from the local permitting authority, Taos County, in general accordance with Taos County and New Mexico Regulation and Licensing Department, Construction Industries Division (CID) regulations. According to 14.5.2.8.A NMAC, no building shall be removed or demolished unless the applicable permit has been obtained from the CID.

2.3.3 Hazardous or Other Regulated Waste

The Questa Mine is a large quantity generator of hazardous waste (EPA ID #NMD002899094) regulated by the Environmental Improvement Board's Hazardous Waste Management Regulations. Hazardous wastes identified during decommissioning activities will be evaluated for compliance with CMI's large quantity generator status and will be handled in accordance with applicable requirements for each waste stream. Facility characterization and waste management are discussed in Sections 3.0 and 4.0 of this plan, including information specific to individual waste streams, such as asbestos and PCBs.

2.3.4 Septic System

The existing septic system west of, and servicing only, the Guard Shack/Dry Building and a small septic tank and leach field at the IX Plant will be closed or removed as part of Phase 2 demolition activities.

Septic systems associated with the Questa Mine are regulated by NMED under DP-132 (NMED 2011). Decommissioning and demolition activities will be conducted in compliance with DP-132, Section III.35. Wastewater lines will be removed or plugged so that a discharge can no longer occur. The septic tanks will be pumped and the material removed will be disposed of in accordance with applicable regulatory requirements. The tanks will then be backfilled with clean fill or sand, or removed from the site. The area will be regraded to blend with surface topography and to prevent ponding.

3.0 FACILITY CHARACTERIZATION

Facility characterization will be performed for each facility prior to decommissioning and demolition to provide needed information regarding each facility's composition, contents, abatement needs, and disposal requirements.

3.1 Pre-demolition and Decommissioning Inspections

Inspections will be carried out in two phases. Preliminary facility inspections currently are being conducted to do the following:

- Evaluate the condition of each facility, or structure, as well as its current and potential future use/re-use
- Determine and/or confirm facility characteristics (e.g., facility size, structural materials of construction, description of roofing and foundation, other architectural features, utilities present, piping/mechanical, and other special concerns) necessary to develop detailed execution plans for structure dismantling/demolition
- Inventory and evaluate the equipment available for salvage and asset recovery
- Estimate the volumes of construction and demolition (C&D) debris
- Evaluate the potential for scrap metal recycling
- Perform a preliminary identification of building products and wastes that may require special handling

The second phase of facility inspections will involve environmentally-focused inspections conducted to do the following:

- Follow up on environmental concerns or special concerns noted in the initial inspection
- Evaluate decontamination needs for the facility
- Evaluate waste streams that will be present beyond C&D waste (e.g., universal wastes, asbestos-containing material [ACM], unused products to be returned to the manufacturer, etc.).

This second phase of inspections will be performed by personnel trained in decontamination and decommissioning to identify wastes that will require special handling or characterization prior to, or during, demolition. Specific asbestos surveys will be performed by an EPA-certified asbestos inspector, who holds current licensing in the state of New Mexico, to identify and quantify regulated ACM. The asbestos surveys will be performed in accordance with regulatory requirements described in Section 2.3 to support the preparation and submittal of the NESHAP asbestos notification forms.

3.2 Waste Characterization

Sampling and analyses of certain materials may be conducted as part of the facility inspections for waste characterization and planning purposes. Final waste stream characterization will occur at the time of decommissioning and demolition. It will be representative of the wastes being disposed of and will be suitable to meet waste profiling and manifesting requirements (as applicable).

3.2.1 General Waste Characterization Approach

Waste characterization will include assessment of materials or products where waste composition is not known from process knowledge or product information. Additional waste characterization may be required for the following types of materials if present (but may not be limited to):

- Materials contained in unmarked containers to determine contents and disposal requirements
- Material contained in unlabeled drums, containers, buckets, etc.
- Tank bottoms, sludge, or residues
- Components or devices with potential to contain mercury, PCBs, etc., but for which product information does not supply necessary information for waste disposal
- Piping

Where necessary, representative samples of individual material types will be collected for waste characterization purposes (individual or composite samples, depending on the volume and spatial distribution). Analyses performed on samples may include applicable hazardous waste characteristics testing to determine disposal requirements and to meet the needs for waste profiling such as the following:

- Corrosivity
- Toxicity Characteristic Leaching Procedure (TCLP)
 - Metals (SW-846 Methods 1311 TCLP, 6010 for metals, and 7470/7471 for mercury)
 - Volatile organic compounds (VOCs) (SW-846 Methods 1311 TCLP and 8260B)
 - Semi-volatile organic compounds (SVOCs) (SW-846 Methods 1311 TCLP and 8270C)

Evaluation of the ignitability and reactivity of the wastes may also be conducted to establish requirements for disposal. Materials found to be hazardous will be disposed as a hazardous waste. Other materials will be disposed of at CMI-approved disposal facilities in accordance with applicable regulatory requirements and CMI corporate policies.

Some accumulations of waste materials (lab chemicals, solvents, paints, and unidentified materials) may be characterized in the field and lab-packed for disposal by a qualified waste management subcontractor.

3.2.2 Waste Characterization for Select Materials

PCBs

PCBs are regulated by the federal Toxic Substances Control Act (TSCA) and 40 Code of Federal Regulations (CFR) Part 761, which designate requirements for various concentrations of PCBs. Certain equipment and devices, such as light ballasts, transformers, and capacitors, may contain PCBs. For wastes that are suspected to contain polychlorinated biphenyls (PCBs), but for which product information does not supply necessary information for waste disposal, the concentration (parts per million or ppm) of PCBs contained in the material will be determined through sampling and analysis. SW-846 Methods 8082 or 8280 are acceptable methods. The rules do not require any particular characterization method, however. For containers formerly used to contain PCBs, the container will be sampled and analyzed for residual PCBs using wipe samples. Wipe sampling methods will follow the approach and methods outlined in 40 CFR Part 761, Subpart P.

Special Wastes

Special wastes are non-hazardous solid wastes and include wastes such as regulated ACM, sludge, industrial solid waste that requires special handling to prevent harm to the environment or public health and safety, and petroleum-contaminated soils (PCS) meeting specific criteria.

Prior to demolition, all buildings will be surveyed for asbestos. If asbestos is present, it will be properly abated. CMI currently has two approved asbestos abatement contractors, including Keers Environmental and Southwest Abatement Inc.

PCS are designated as a special waste by 20.9.8.15 NMAC if they meet any the following conditions:

- Sum of benzene, toluene, ethyl benzene, and xylene (BTEX) isomer concentrations of greater than 500 mg/kg
- Benzene greater than 10 mg/kg
- Total Petroleum Hydrocarbon (TPH) concentration greater than 1,000 mg/kg

Wastes Containing Heavy Metals

Non-equipment mercury containing wastes and wastes containing other heavy metals, including lead, will be characterized using TCLP methods acceptable for metals.

Other Wastes

A number of other wastes are able to be characterized by product information, nameplate information or a material safety data sheet (MSDS)/safety data sheet (SDS). These wastes include the following:

- Unused or partially-used reagents and chemicals
- Explosives
- Fuels
- Radioactive materials
- Refrigerants, such as chlorofluorocarbons (CFCs), halogenated fluorocarbons (HFs), or halons
- Paints
- Tires
- Universal wastes

While these wastes do not require special characterization, they may require special handling or disposal which is described by waste stream below.

Unused or partially-used reagents, chemicals, explosives, and fuels

Unused or partially-used reagents, chemicals explosives, and fuels (including solids, liquids and gases, plus compressed gas cylinders) may be returned to the manufacturer for reuse or disposal, or may require special disposal based upon their contents as described in the applicable MSDS/SDS. A hazardous waste contractor may be engaged to pack, transport, and appropriately dispose of these materials.

Radioactive materials

Radioactive materials may be present in smoke detectors, exit signs, and flow and density meters. Some of this equipment may require special handling and disposal. Equipment or devices will be assessed for the presence of radioactive material, based on equipment type and/or labeling on the equipment or device. Equipment and devices will be segregated by type for recycling, where possible, or disposal, in accordance with 20.3 NMAC. Two density gauges are present on the tailing pipelines (located in the Pipeline Flow Monitoring Shed) and are scheduled for removal. Sources, such as those utilized in flow and density meters, typically are subject to license requirements and will be managed by qualified personnel or subcontractors for recycling or re-sourcing, to the extent possible. Once removed, notification documenting the transfer of ownership or disposition of the material will be provided to MMD and to the NMED, Environmental Protection Division, Radiation Control Bureau, when necessary or required, to remove the source from the license.

Refrigerants CFCs, HFs, and Halons

Refrigerants such as CFC, HFs, and halons are ozone-depleting chemicals and must be disposed of properly. These constituents may be found in refrigerants, fire extinguishers, air conditioners, walk-in coolers, water fountains, dehumidifiers, heat pumps, vending machines, and refrigerator/freezer/chillers, etc. The materials will be removed from equipment, enabling that equipment to be recycled or disposed of at the Taos Municipal Landfill. The refrigerant will be removed by an EPA certified technician using certified recovery equipment.

Paints

Many paints are considered hazardous waste and will be disposed of, accordingly. Containerized oil-based paints, paint thinner, primers, stains, varnishes, and solvent-based paint or varnish strippers are considered hazardous waste. Latex-based paints may be allowed in a solid waste landfill if allowed to evaporate and solidify. Other paints, as described above, will be disposed of with a hazardous waste contractor.

Tires

Tires will be recycled or sent to a specialized waste tire facility.

Universal Wastes

Universal wastes are regulated under 20.4.1.1000 NMAC, which has adopted the federal rule 40 CFR Part 273 as modified by 20.4.1.1001 NMAC. Universal wastes include batteries, pesticides, mercury-containing equipment, and lamps. During Phase 2 activities, it is expected that the quantity of universal waste accumulated will not exceed 5,000 kg at any time, qualifying the facility as a small quantity handler of universal waste. As a small quantity handler, notification to EPA of waste-handling activities is not required. If it becomes apparent that the 5,000 kg threshold will be exceeded, however, additional notification requirements to EPA and tracking manifests will be required before exceeding the 5,000 kg limit.

Universal waste will be handled in accordance with the procedures of 40 CFR Part 273.13, including proper handling, storage, and sorting in such a way to prevent release of universal wastes to the environment. Universal waste will be labeled properly according to 40 CFR Part 273.14 and 20.4.1.1001 NMAC. Wastes may not be accumulated for longer than 1 year from the date the waste is generated. Although maintenance of universal waste shipment records is not required for small quantity handlers under 40 CFR 273.19, records will be maintained as part of waste management logs.

3.3 Decontamination Approach

Following preliminary characterization, decontamination procedures may be applied to segregate waste streams with different disposal requirements. In general, decontamination will be conducted for process-related equipment and piping within the IX Building. Phase 2 facilities, other than the IX Building contain no process-related components. Decontamination for Phase 2 facilities, therefore, will be limited to removal of residual chemicals from the process tankage,

pipng, and equipment in the IX Building and pressure washing concrete and sumps where there is visual evidence of significant staining.

Where pressure washing occurs, wash water will be collected and sampled for oil and grease, and metals. The wash water fluids will be containerized and shipped offsite for disposal, as appropriate, based on sampling results.

4.0 WASTE MANAGEMENT

Waste management procedures have been identified to address the anticipated waste streams described in Section 4.1. The procedures are designed to provide for safe and efficient waste removal and disposal. These procedures, including discussion of waste streams, waste disposal, best management practices, and recordkeeping are provided in the sections below.

4.1 Waste Streams

Waste streams associated with Phase 2 activities which are likely to be identified through the facility characterization and inspection process include, but are not limited to the following:

- Concrete
- Metal siding
- Wood
- Fiberglass insulation
- Interior furnishings
- Universal wastes
- Piping
- Reagents and potentially hazardous chemicals
- Miscellaneous petroleum products including lubricants and fuel
- Decontamination fluids
- Septic system wastes
 - Sewage sludges
- CFCs and other refrigerants
- Radioactive-containing material
- Asbestos-containing material or soils
- PCB-containing material
- C&D debris (e.g., inert debris, such as concrete wood, metals, glass, and salvaged building components from building materials generated during construction, renovation, and demolition of buildings)

Waste streams will be segregated for proper characterization and subsequent disposal. Waste disposal requirements differ by waste stream, and are discussed in Section 4.2.

4.2 Waste Disposal

Demolition-related waste will be hauled to CMI-approved disposal locations. Waste handling, separation, salvage, and disposal procedures for each waste stream are described in Table 4-1. Proper personal protective equipment specific to waste streams will be worn when handling wastes.

Table 4-1. Phase 2 Demolition-related Waste Streams

Waste Stream	Anticipated Disposal Location	Disposal Practices
Scrap Metal	Rocky Mountain Recycling	Metal segregation for recycling will be performed at the demolition site.
Fiberglass insulation	Taos Municipal Landfill	No special disposal practices are required.
Interior furnishings	Taos Municipal Landfill	No special disposal practices are required.
Wood	Taos Municipal Landfill	No special disposal practices are required.
Concrete	Open Pit concrete rubble placement area or other approved on-site location	Concrete will be reduced to rubble-sized material with no extruding or free rebar. Extruding rebar will be trimmed and placed in metal recycling bins together with free rebar. Concrete will be hauled to the designated placement area in the Open Pit. Concrete also may be used as backfill in the Tailing Impoundments or Mill Area.
Asbestos-containing wastes	Waste Management Colorado Springs Landfill (Colorado Springs, CO) or Midway Landfill (Fountain, CO)	Material will be segregated, double bagged in plastic, or containerized in drums, supersacks, or lined rolloffs. Material will be tarped in haul trucks for transport to the landfill to prevent migration of material. Transite material also will be transported off site according to appropriate procedures for non-friable asbestos.
Radioactive waste	Clean Harbors (Deer Trail, Colorado), VEGA – ReSource Program (Cincinnati, Ohio)	Wastes will be segregated and profiled based on product information (i.e., smoke detectors, exit signs). Approval will be obtained for waste from Clean Harbors based on the profile. The Clean Harbors, facility is designated as a Low-level Radioactive Waste Facility for New Mexico.
Refrigerants (i.e., CFCs, HFs, halons)	Refrigerants will be removed by an EPA certified technician using certified recovery equipment	CFCs, HFs, or halons will be drained or removed for specialized disposal. Appliances with these refrigerants will have the refrigerant removed and then may be disposed of at the Taos Municipal Landfill.
Electronic Waste	Approved Recycling Center	In accordance with CMI waste stewardship program.
Tires	Approved recycler	Tires may need to be cut in half.
Paints	Clean Harbors	Wastes will be segregated and profiled based on product information. Approval will be obtained for the waste from Clean Harbors based on the profile.

Waste Stream	Anticipated Disposal Location	Disposal Practices
Universal Wastes	Clean Harbors	Wastes will be segregated and profiled based on product information (i.e., batteries, mercury-containing equipment, lamps). Approval will be obtained for the waste from Clean Harbors based on the profile.
Unused or partially used reagents and chemicals, explosives, fuels	Return to manufacturer or Clean Harbors	Wastes will be segregated.
Sewage-contaminated soils	Waste Management Rio Rancho Landfill	Material will be transported and disposed of at the Landfill. Proper PPE and hygiene practices will be employed when handling sewage-contaminated soils.
Leach field piping	Taos Municipal Landfill	Leach field piping material can be transported and disposed of at the Taos Municipal Landfill. Proper PPE and hygiene practices will be employed when handling leach field piping.
Septic tank fluids and septic decontamination rinse water	AAA Pumping Service	Septic tank fluids will be pumped and removed from the tank. Following initial pumping of fluids, the tank will be rinsed to remove residual solids, leaving the concrete septic tank free of sewage solids. Fluids and residuals will be transported off site for proper disposal by an approved contractor. Proper PPE and hygiene practices will be employed when handling septic tank fluids, rinse water, and residual solids.
Polyethylene pipe	Taos Municipal Landfill	Polyethylene piping will be placed in dumpsters for disposal at the Taos Municipal Landfill. Piping that contains unidentified scale or other residuals will be set aside in a lined and covered area for characterization prior to determining waste disposal options.
General C&D debris	On-site dumpsters located near each building	General C&D debris, including paper, cardboard, plastic, inert piping, and wood, will be placed in dumpsters located on site near each building. Recycling will be conducted according to CMI's recycling guidelines for paper, cardboard, No. 1 and No. 2 plastic bottles, and aluminum. No waste of unknown character, hazardous waste, or universal waste (e.g., batteries, mercury-containing equipment or bulbs) will be placed in the dumpsters. Dumpsters will be covered to prevent blowing waste materials.
Used Oils	Safety Kleen (Albuquerque, New Mexico)	Oils from equipment will be drained, containerized, and labeled for disposal.

Waste Stream	Anticipated Disposal Location	Disposal Practices
Petroleum Contaminated Soil and Oily waste from spills or cleanup	Waste Management Rio Rancho Landfill or Clean Harbors	Hydraulic oil, motor oil, oil filter residues, paint thinners, solvents, etc., spilled onto the ground will be contained, cleaned up, and disposed of properly. Characterization of wastes will be required to determine if disposal as special waste (i.e., PCS) is required.

4.3 Best Management Practices

The following best management practices (BMPs) will be implemented throughout the waste management process, in conformance with Chevron guidance:

- Sites will be maintained in a clean and safe manner. Trash generated during activities will not be allowed to accumulate, will be collected daily, and will be disposed of properly in approved trash containers.
- All site personnel shall have proper training and PPE for waste handling and disposal activities.
- The handling of hazardous and universal waste will comply with RCRA standards and Title 20 NMAC.
- Containerized waste will be properly labeled. Hazardous or non-hazardous stickers will be placed on containers, as appropriate, for waste characteristics.
- All compliance documents, including sample results, inspection sheets, training forms, waste tracking logs, and manifests will be maintained on site.

4.4 Recordkeeping

Recordkeeping is an integral part of documenting proper waste management and disposal activities. Contractors and their subcontractors will maintain copies of waste management and disposal documents and will make them available for review by CMI. Records will be maintained for a minimum of 3 years from the date of generation.

For non-hazardous waste materials, the nature of the material, volume, date of pickup, and disposal location will be documented. Copies of this documentation will be provided to the construction manager on a daily basis and will be available to CMI for inspection. Additional documentation to retain includes the following:

- Waste tracking sheets
- Cumulative waste inventory logs
- Record of any chemical analysis performed on waste materials
- Manifest documents for special or hazardous waste, as applicable

5.0 SOIL CONTAMINATION REMEDIATION

The Tailing Facility Area (as well as other areas) of the Questa Mine site has been the subject of numerous previous investigations focused on identifying the nature and extent of contamination in soil and groundwater. The results of these investigations are documented in published reports, including the Molycorp Remedial Investigation Report (URS 2009), which formed the basis for the development of the EPA's selected remedy (EPA 2010). As part of the RI, five biased soil samples were collected from the Maintenance Yard Area near former tanks and doorways. Near the IX Building three biased soil samples were collected in front of bay doors and one sample downgradient of a retention basin. Samples collected from all sites were analyzed for a broad suite of constituents including target analyte list (TAL) metals plus boron and molybdenum, anions, and general chemistry parameters, as well as SVOCs in the Maintenance Yard Area. Soil data from the Tailing Facility Area were compared against human health screening level criteria (SLC) for arsenic, iron, molybdenum, and benzo(a)pyrene. The ecological evaluation contaminants of potential concern (COPC) for the Tailing Facility Area include: antimony, barium, boron, cadmium, chromium, copper, iron, lead, manganese, mercury, molybdenum, selenium, vanadium, zinc, and carbazole.

Molybdenum concentrations in all soil samples from the Tailing Facility Area were below the human health SLC. Arsenic concentrations exceeded the SLC at all locations, but arsenic was also observed at concentrations in excess of the SLC at all sample locations within the reference soil area for the Tailing Facility. The SLC for iron and benzo(a)pyrene were exceeded at one sample location each, within the Maintenance Yard Area. No concentrations in excess of the human health SLC were observed in samples from the IX Building area. According to the RI, only four Tailing Facility COPCs were elevated compared to the reference area in one or more media: cadmium, lead, molybdenum, and zinc. Of these COPCs only molybdenum had an elevated HQ significantly different from the reference location. The RI conclusions focus on molybdenum, with the final summary stating that adverse effects at the Tailing Facility may be limited and that land management has a greater impact on the biological environment.

Previously unidentified or unknown soil contamination may exist beneath or adjacent to facilities proposed to be decommissioned and demolished. Sampling will be conducted and remediation will be performed where there is evidence of soil contamination exposed or encountered through removal of foundations or site grading and earth-moving activities.

5.1 Soil Investigation

This section describes the general approach to the investigation of potential soil contamination during Phase 2 activities. A Soil Sampling and Analysis Plan is being developed, as a separate submittal, that will provide additional details regarding the soil sampling to be conducted during the Phase 2 decommissioning and demolition effort.

Because the site has been generally characterized during the RI, sampling associated with the removal of structures will be performed as required under the building and cleanup closure requirements of Discharge Permit DP-933 and focused on areas not previously investigated, such

as areas beneath the buildings and potentially contaminated soils discovered during subsequent earth-moving/site grading work. Within 60 days of the completion of each investigation, CMI will submit a summary report presenting all sampling locations, test protocols and test results to the NMED and MMD. Standard operating procedures for soil sampling are discussed further in the Phase 2 Soil Sampling and Analysis Plan.

5.1.1 Sampling Beneath Foundations

Soil sampling will be performed beneath building foundations and slabs, if removed as part of the demolition activities. Following demolition the former building area will be subdivided into an even number of rectangular sampling grids, and sampled in accordance with the Soil Sampling and Analysis Plan. This grid-based approach, with screening performed using a photo-ionization detector (PID), will be used to determine the location of samples submitted for laboratory analysis.

5.1.2 Other Soil Contamination

Potentially contaminated soil discovered during the demolition or subsequent earth-moving/site grading process will also be subjected to screening and sampling. If soil is encountered during excavation or site grading activities with observed visual or olfactory evidence of contamination, work will stop temporarily to allow a visual inspection of the area and a sample of the material will be collected and subjected to head space readings using a PID to determine reference PID readings. Following an initial assessment of the area to determine the potential extent of potentially contaminated soil, the excavation will continue in conjunction with ongoing monitoring and additionally sampling and PID screening. Impacted soil will be segregated and temporarily stockpiled in a lined area for sampling. Following the completion of the excavation to the planned lines and grades, the area where potentially contaminated soil was encountered will be subject to additional grid-based sampling, where applicable.

Sampling of the stockpiled soil will be performed to collect representative samples suitable for waste profiling at a frequency of approximately one sample per every 100 cubic yards of material, or as otherwise determined acceptable to the facility accepting the soil for disposal.

5.2 Soil Remediation

Remediation for metals (or other CERCLA COPC) impacted soil may include capping or placement of soil cover in accordance with Mining Act permit or CERCLA requirements.

If PCS are encountered, disposal as a special waste will be required if the sum of BTEX isomer concentrations is greater than 500 mg/kg, benzene is greater than 10 mg/kg, or the TPH concentration is greater than 1,000 mg/kg. Soil cleanup levels will be developed as appropriate for the nature and extent of the contamination, per relevant sections of the NMAC, such as 20.5.12 for releases of petroleum products from storage tanks. Additional details regarding preliminary investigation, screening, and sampling will be developed in the Soil Sampling and Analysis Plan.

Excavation of other contaminated soils will include segregation and stockpiling in a lined area (the liner will be compatible with the contaminant of concern), waste profile sampling, and disposal at an appropriately-permitted facility for the contaminants of concern. Sampling will be conducted during excavation to verify that removal meets the cleanup requirements, and that the full extent of contamination above the cleanup levels has been removed.

5.3 Contingency Plan

The installation of a soil cover following decommissioning and demolition activities will be the primary remediation method to address known surface soil contamination associated with the Tailing Facility Area. As described above, if contamination is discovered during the demolition or subsequent earth-moving/site grading process that presents a potential source area for groundwater contamination and requires removal, soil sampling will be performed in accordance with the Soil Sampling and Analysis Plan, and remediation will be performed in accordance with applicable requirements.

6.0 STORMWATER MANAGEMENT

Decommissioning and demolition activities which disturb more than 1 acre of land, requires coverage under EPA's 2012 CGP for stormwater, as discussed in Section 2.0. If necessary, an NOI for coverage under the CGP will be submitted a minimum of 14 days prior to ground-disturbing activities. A SWPPP describing erosion control best management practices will be developed, implemented, and maintained on site. The SWPPP will conform to EPA guidance and will contain the following elements:

- Information describing SWPPP contacts, site operators, and emergency notifications
- Site description
- Description of ground-disturbing activities
- Description of potential pollutants and receiving water
- Information regarding the start and duration of activities
- Stormwater control measures
- Site map of affected areas
- Procedures for inspection, maintenance, and corrective action for control measures
- Stabilization practices
- Staff training
- Compliance with other federal requirements

The SWPPP will indicate specific disturbance areas and associated acreages. It will describe pollutants associated with stormwater (i.e., sediments) and the nearest receiving stream which is the Red River located south of the site. The SWPPP will describe the anticipated sequence of demolition activities and associated stormwater control measures.

Erosion and sediment control measures will include installation of structures or materials to minimize movement of stormwater runoff from the site. Temporary controls will be used to reduce the velocity of stormwater flows and to intercept suspended sediments conveyed by overland flow. Control measures will be selected, installed, and maintained in accordance with the manufacturer's specifications and standard engineering practices. The controls will be designed to retain sediment within the affected area and to avoid, to the greatest extent possible, sediments from entering surface water.

Stormwater control measures likely to be used on site are berms along certain perimeters of the demolition area to prevent stormwater from entering the area, and along other perimeters to prevent stormwater within the demolition area from leaving the site. Berms will be constructed using clean fill or soil from approved sources. Berms will be inspected periodically in accordance with the provisions of the SWPPP.

Silt fences and/or wattles may be used on down-gradient slopes to capture sediment conveyed by sheet flow. Silt fences provide a temporary barrier which reduces runoff velocities and allows sediment to collect behind the silt fence. Wattles, consisting of erosion and sediment control barriers constructed of straw wrapped in a tube of biodegradable plastic or other casing, may be placed to reduce stormwater velocity and to capture sediment. A typical wattle is 8 to 10 inches in diameter and can be 25 feet long. Wattles will be installed perpendicular to slopes in shallow trenches.

Grade breaks also may be used to guide stormwater flows to areas where it can be intercepted and routed to retention ponds, or other controls, as appropriate.

The SWPPP will describe stabilization practices, such as slope design, revegetation, and use of a turf reinforcement mat to promote revegetation.

The SWPPP will be updated as facility changes affect stormwater management activities.

7.0 SCHEDULE

The proposed schedule for decommissioning and demolition activities addressed in this plan for Phase 2 activities is presented in Table 7-1.

Table 7-1. Schedule

Activity	Schedule
Building Demolition and Cleanup Plan submission	November 2014
Building Demolition and Cleanup Plan approval	February 2015 (Conditional Approval)
Phase 2 Facility Decommissioning	April – July 2015
Phase 2 Facility Demolition	May 2015 – August 2015

8.0 REFERENCES

- CMI 2013a. Supplemental Closeout Plan, Questa Tailing Disposal Facility and Stormwater Management and Water Treatment Project, Questa Mine Permit TA001RE, Chevron Mining Inc. October 17, 2013.
- CMI 2013b. Permit Revision Application, Tailing and Water Management Project, Questa Mine Permit TA001RE, Chevron Mining Inc. January 29, 2013.
- EMNRD 2002. Permit Revision 96-2 to Permit No. TA001RE, Questa Mine - Mine and Mill Site Existing Mining Operation. EMNRD, MMD. May 24, 2002.
- EPA 2009. Molycorp, Inc. Site (Currently Chevron Mining, Inc.) Proposed Cleanup Plan. December 2009.
- EPA 2010. Record of Decision, Molycorp, Inc., Questa, New Mexico. CERCLIS ID NO: NMD002899094. December 20, 2010.
- NMED 2008. Discharge Permit Renewal and Modification, Chevron Mining Inc. Tailing Disposal Facility, DP-933. February 29, 2008.
- NMED 2011. Ground Water Discharge Permit Renewal and Modification. Chevron Mining Inc. – Questa Mine. DP-132. August 16, 2011.
- NMED 2012. Risk Assessment Guidance for Site Investigations and Remediation. NMED. February 2012. Updated June 2012.
- URS 2009. Molycorp Remedial Investigation Report, Revision No. 2. July 3, 2009.
- URS 2013. Mill Area Removal Action Completion Report. Chevron Questa Mine Superfund Site. Prepared for Chevron Mining Inc. March 6, 2013.

FIGURES



NOTE: AERIAL PHOTO TAKEN 2012 PROVIDED BY CHEVRON MINING INC.
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 FEET 1"=1500'

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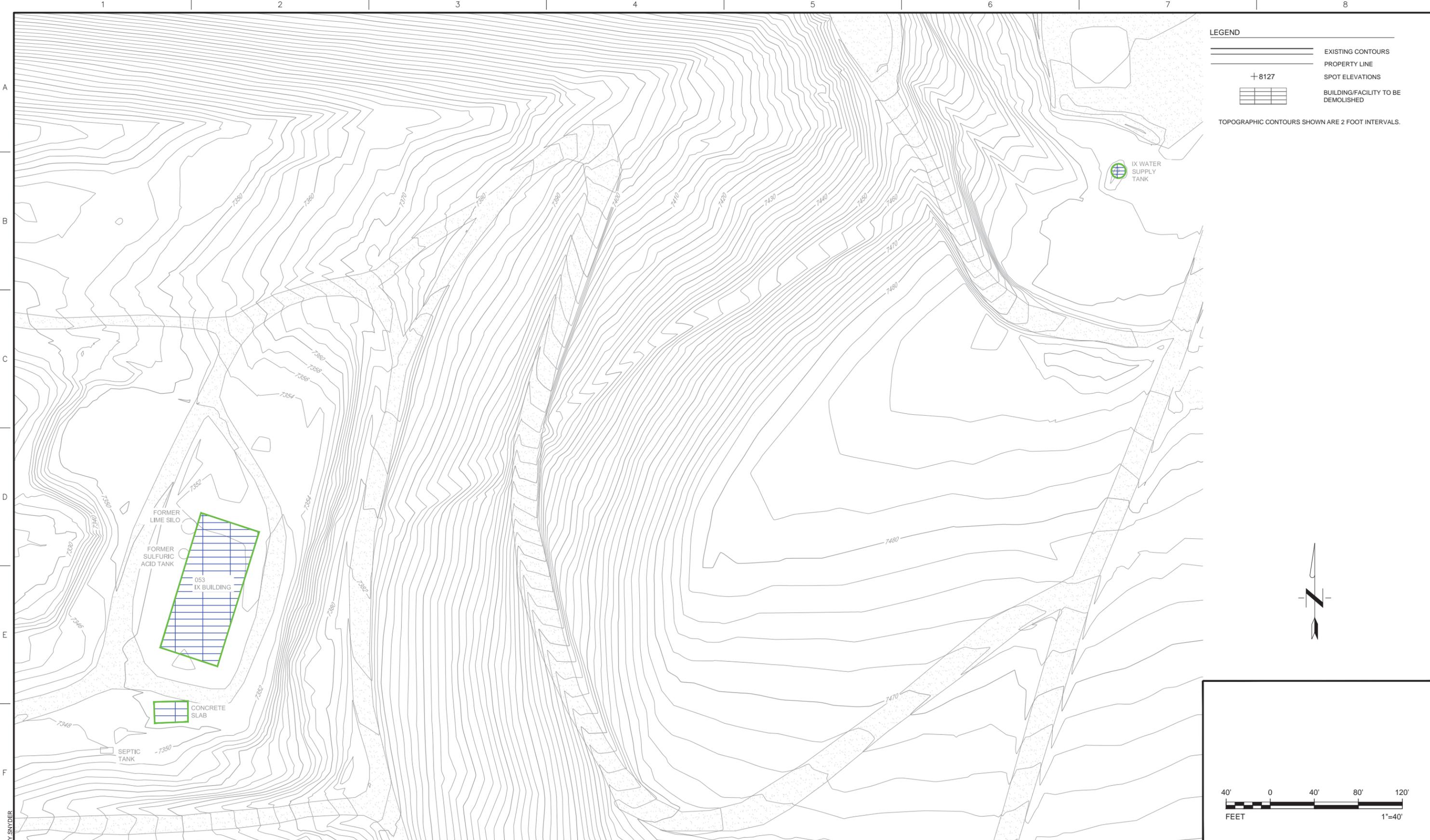
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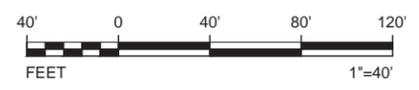
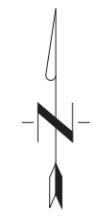
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LEGEND

- EXISTING CONTOURS
- PROPERTY LINE
- SPOT ELEVATIONS
- BUILDING/FACILITY TO BE DEMOLISHED

TOPOGRAPHIC CONTOURS SHOWN ARE 2 FOOT INTERVALS.



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IX BUILDING SITE PLAN

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