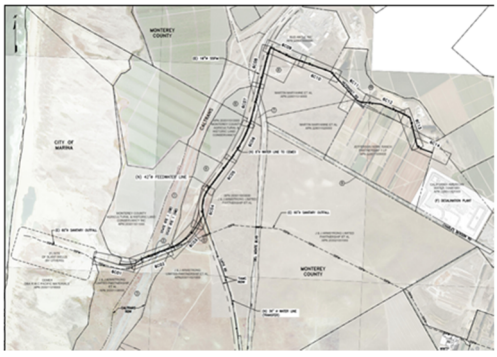
Material Recycling and Disposal Plan



Transfer and Feed Water Pipelines

Garney Project #1115

Overview:

The Transfer and Feedwater pipelines consists of approximately 59,000 ft of pipeline installation through the cities of Seaside and Marina and the county of Monterey. The construction activities will affect the road surfaces and native material where the pipe section and bedding material will be installed. Construction activities will also affect the unimproved surfaces in the TAMC right of away along highway 1. Garney Construction has come up with the following plan to ensure all excavated materials to be off hauled are recycled or disposed of in a manner consistent with the MMRP and contract requirements. Garney is committed to recycling more than 50% of removed site material or material construction waste to reduce project wide environmental impact. The primary material classifications to be removed during construction are Asphalt Concrete, Concrete, and Native Soil. There will be other construction wastes that require removal, including green waste (tree limbs, branches, etc.) and miscellaneous demolition materials. These items are addressed in the following plan.

Asphalt Concrete and Concrete Removal and Disposal:

The asphalt and concrete off haul materials will be primarily from roadway sections removed for installation of the 36" pipeline. Once the final pipe alignment is confirmed in the field with survey, the excavation area (approximately 4-5 ft wide) will be sawcut vertically on both sides. Once sawcutting is complete, the material (asphalt or concrete) will be removed utilizing an excavator and placed into a superdump dump truck for off haul. The native material below the AC concrete section will be kept separate from the top section in the removal process. A separate submittal for dust mitigation measures to be performed during material removal will be submitted.

Once the truck is full, the material will be off hauled to the Monterey Regional Waste Management District recycling location in Marina to be recycled into Class 2 AB. See attachment #5 confirming material will be accepted at their facility for material recycling. As this site is within the Monterey Peninsula, mileage for hauling of material is minimized. During the project, if the facility is full and cannot accept material any of the days Garney is performing off haul, Garney will send AC material to the Granite Construction AC plant in Salinas for recycling and reuse. Please see attached letter from Granite Construction confirming acceptance and recycling of this material in Attachment #2.

Soil Classification, Removal, and Disposal:

During the pipe installation, it is Garney's intent to use the native soil as backfill material for the entire section above the pipe and the required sand section surrounding the pipe. However, as the pipe section will offset a portion of the existing native material in the roadway sections, there will be excess native material that will need to be disposed of. The soil will be classified to ensure proper disposal based on the soil characteristics found. To classify this material Garney will take samples during the potholing operations to obtain a representative sample of material along the pipeline. These samples will be identified by Station numbers along the pipe alignment to easily identify the location of each sample in reference to the design pipe layout and City streets. This material will be tested by Pacific Crest Engineering Inc. (PCE) for the following criteria per the environment specification requirements:

- Test Method SW8015m – Multi-Range TPH(g,d,mo)
- Test Method SW6020 – CAM 17 metals
- Test Method SW8260B – Volatile Organic Compounds
- Test Method SW8081A – Organochlorine Pesticides
- Test Method SW8151A – Chlorinated Herbicides

Areas classified within the environmental limits will then be identified, and the classification reports will be sent to Monterey Regional Waste Management District (MRWMD) for disposal acceptance. See Attachment #3 for the MRWMD material disposal requirements. This material will be excavated during the pipeline installation utilizing an excavator, and loaded into Superdump Dump trucks in the same manner as found in the above AC/Concrete disposal section. Material will then be hauled to MRWMD for reuse. Material disposed of at MRWMD will be reused for intermediate cover, reducing the amount of virgin material otherwise needed by MRWMD to accomplish this task. See Attachment #4 for reuse information from MRWMD.

Should any particular sample come out as above threshold limits for hazardous material, the area will be identified and further potholes/sampling will be performed to identify the extent of the contaminated section and to what extent the hazardous material is classified. At that point, based on the material classification, material will be removed and disposed of to a proper receiving facility utilizing proper controls, chain of custody, and mitigation methods for the particular hazardous material in question. An amendment to the plan will be provided based on hazardous material classification should any hazardous materials be found. Known areas currently in question for potential hazardous material are as follows:

1. General Jim Moore and Gigling Road- potential VOC's from gas stations

These areas of interest will be specifically potholed and sampled to ensure material in the area is properly classified.

During excavation activities in areas previously identified as clean native soil, any material be found to have a noticeable odor or be visibly stained will be stockpiled separate from the clean fill material and will be placed on plastic, with BMP's placed around the stockpile to mitigate any leeching of the material. In lieu of wetting this material down to reduce dust per the Dust Control Plan, the material in question will be covered with plastic. The owner will be immediately notified and samples will be taken by PCE to classify the material per the above tests. This material will be kept separate and will be disposed of in a proper fashion only once the material classification is identified, and the required precautions are identified and taken during disposal based on the hazards found.

Green waste and Construction Debris Disposal:

The facility at MRWMD provides recycling services for green waste and construction materials to satisfy the recycling requirements set forth in the California Building Code, local regulations, and as required in the Contract Specifications section 01062. See Attachment #5 for the recycling overview.

Green waste will be anticipated in the TAMC right of way. Any areas that require tree trimming to allow equipment access for pipeline excavation along the alignment, Garney construction will first identify the location for trimming needed, allow review of the site by Owner environmental team for any sensitive species or migratory birds, and notify the respective city of the tree trimming operations. Tree trimming would only occur as authorized by the respective oversite authorities. Any required trimmings would be placed into a dump truck, and brought to MRWMD facility for recycling. See Attachment #6 for recycling information.

For any Miscellaneous construction material from the project, Garney will send loads of material to MRWMD for recycling per their Construction and Demolition Recycling Program. See Attachment #7 for information.

Recycling Documentation:

Garney will keep all receipts from recycling of material, and will provide these receipts to the owner upon completion of the project as documentation that the waste reduction, recycling, and diversion goals have been met.

ATTACHMENT #2

TO: Garney Construction
Sean Summers

FROM: Mitchell Bush, Mark Saucedo

DATE: 10/28/2016

RE: Salinas Asphalt Plant Recycle Policy

Granite Construction's Salinas Asphalt Facility accepts asphaltic concrete grindings and broken asphaltic concrete for recycling purposes. The material is then processed and re-used in the production of new asphaltic concrete products.

If you have any questions regarding our recycle capabilities please contact:

Mitchell Bush
Mitchell.Bush@gcinc.com
(408)-908-0068

Mark Saucedo
Mark.Saucedo@gcinc.com
(831)-750-0361

ATTACHMENT #3

Monterey Peninsula Landfill

WASTE ACCEPTANCE CRITERIA

FOR SPECIAL WASTES

The Monterey Regional Waste Management District (MRWMD) owns and operates the Monterey Peninsula Landfill (MPL), located at 14201 Del Monte Boulevard, two miles north of Marina, California. MRWMD has developed and implemented a Waste Screening and Acceptance Program to assist in preventing hazardous and other prohibited wastes from entering the facility and to establish procedures and acceptance levels for special (nontraditional) solid wastes.

The MPL accepts non-hazardous special wastes that have been properly sampled, analyzed, and found to be acceptable for disposal at the landfill or for use as cover at the landfill. The MRWMD **does not accept** waste that is defined as hazardous by RCRA and/or CCR Title 22.

The MPL is constructed with Subtitle D cells with composite liners and leachate collection and methane management systems. The cells receive predominantly municipal solid waste (including residential and commercial waste) and construction and demolition debris. In addition, the following special wastes may also be accepted for disposal at the landfill:

- Materials which meet California's definition of non-hazardous waste
- Petroleum contaminated soils
- Treated medical wastes
- Non-friable asbestos materials
- Treated wood waste
- Well drilling mud
- Harbor and lake dredgings
- Wastewater and water treatment plant sludge, screenings, and grit containing at least 20% solids.
- Limited volumes of various liquid wastes, with moisture content of greater than 50%
- Household fireplace ash
- Agricultural film plastic

Hazardous waste, friable asbestos, radioactive waste, and untreated medical waste (biohazardous or infectious waste) **are not allowed** for disposal at the MPL

Continued.

PRE-APPROVAL REQUIREMENTS

All special wastes must be pre-approved by MRWMD prior to acceptance at the MPL. MRWMD requires the completion of a Generator Waste Profile, along with any required analytical results before pre-approval will be granted. It is the responsibility of the generator to certify that the materials for management at MPL are non-hazardous per CCR Title 22 Section 66260. For materials that require laboratory analysis, the generator must provide representative analysis. MRWMD's site permits do not require any specific testing requirements or sampling frequency for individual waste streams. The California Department of Toxic Substances Control (DTSC) has developed an Information Advisory for clean fill sampling. This Information Advisory can be found at www.DTSC.ca.gov. Contact DTSC for assistance in developing an appropriate sampling plan for your special wastes.

NON-FRIABLE ASBESTOS ACCEPTANCE PROCEDURES

All non-friable asbestos containing waste must be pre-approved by MRWMD prior to acceptance. The following information provides general requirements for acceptance of non-friable asbestos containing wastes at MPL.

Asbestos containing wastes, which are friable and contain 10,000 ppm (1%) or greater friable asbestos, are regulated as a California Hazardous Waste. Friable asbestos is one that can be reduced to a powder or dust under hand pressure when dry. This classification standard is defined in California Code of Regulations, Section 66261.24. Friable asbestos containing wastes **are not accepted** at MPL.

Non-friable asbestos containing wastes and wastes containing less than 10,000 ppm (1%) friable asbestos are non-hazardous wastes. DTSC considers non-friable asbestos containing waste to be non-hazardous regardless of its asbestos content. If non-friable asbestos has a high probability of being crumbled, pulverized, or reduced to powder, the material will be considered a Regulated Asbestos-Containing Material (RACM) and thus unacceptable for disposal at MPL.

For acceptance at the MPL, the procedures listed below must be followed:

- Non-friable asbestos containing waste must be pre-approved by MRWMD staff prior to acceptance at the MPL.
- Non-friable waste must be double wrapped and sealed in plastic of 6-millimeter (6-mil) thickness, or completely covered in the truck bed by a tightly secured tarp from which the fibers cannot escape.
- Each shipment must be accompanied by a completed Generator Waste Profile manifest form.
- Each load must be scheduled at least 72 hours prior to arrival.
  Hours of acceptance are 7:00 a.m. to 4:00 p.m., Monday – Friday.

Continued

CONTAMINATED SOIL TESTING REQUIREMENTS

The MRWMD reserves the right to require the generator to perform additional analytical testing. The minimum required sampling frequency is as follows:

Stockpiles:	Less than 100 cubic yards:	3 discrete samples.
	100 to 500 cubic yards:	5 discrete samples.
	More than 500 cubic yards:	5 discrete samples plus one additional sample per 250 cubic yards in excess of 500 cubic yards.

PETROLEUM HYDROCARBONS	CONSTITUENT	EPA METHOD
Diesel	TPH (Diesel)	3550/8015
Gasoline	TPH (Gasoline)	5030/8015
	BTEX	5030/8020
	MTBE	8020
	Lead	6020A
Waste Oil	TPH (Diesel, Gasoline, Motor Oil)	8015, 5030
	Volatile Organics	8260/8010/8020
	Semi-Volatile Organics	8270
	Organochlorine Pesticides	8081
	PCBs	8082
	CAM 17 (Title 22) Metals	6020A, 7471
Fuel Oil/Bunker Oil/Hydraulic	TPH	8015
Oil/Kerosene	BTEX	5030/8020

Continued

CONTAMINANT THRESHOLD LIMITS

The MRWMD only accepts material that is represented by analytical results indicating concentrations below the following listed threshold values:

PETROLEUM HYDROCARBONS	THRESHOLD VALUE FOR ACCEPTANCE (1)	
Contaminant	**TTLC (2) (mg/kg)**	**STLC (3) (mg/L)**
MTBE	12	0.6
Benzene	10	0.5
Toluene	24	1.2
Ethylbenzene	18	0.9
Xylene	12	0.6
TPH as Gasoline, Kerosene, or Jet Fuel	1,000	
TPH as Diesel	5,000	
TPH as Motor Oil, Hydraulic, Heating, or Bunker Oil	8,000	

(1) There is no regulatory determined concentration at which point TPH is defined by California or Federal regulations as "hazardous waste".
(2) Total Threshold Limit Concentration.
(3) Soluble Threshold Limit Concentration.

INORGANICS	THRESHOLD VALUE FOR ACCEPTANCE			
Contaminant	**TTLC (mg/kg)**	**Hazardous Waste Criteria(1) (mg/kg)**	**STLC (mg/L)**	**Hazardous Waste Criteria(1) (mg/L)**
Antimony	400	500	0.06	15.0
Arsenic	400	500	0.5	5.0
Barium	8,000	10,000	10	100
Beryllium	60	75	0.04	0.75
Cadmium	80	100	0.05	1.0
Chromium (VI)	400	500	0.5	5.0
Chromium (Total or III)	2,000	2,500	0.5	5.0
Cobalt	6,400	8,000	0.5	80
Copper	2,000	2,500	20	25
Fluoride salts	14,400	18,000	90	180
Lead	800	1,000	0.5	5.0
Mercury	16	20	0.02	0.2
Molybdenum	2,800	3,500	0.1	350
Nickel	1,600	2,000	1.0	20
Selenium	80	100	0.1	1.0
Silver	400	500	0.5	5.0
Thallium	560	700	0.005	7.0
Vanadium	1,920	2,400	0.2	24
Zinc	4,000	5,000	200	250

(1) CCR Title 22 Regulatory Limits (Division 4.5, Chapter 11, Article 2)

Continued.

CONTAMINANT THRESHOLD LIMITS

ORGANIC COMPOUNDS	THRESHOLD VALUE FOR ACCEPTANCE		
Contaminant	**TTLC (mg/kg)**	**STLC (mg/L)**	**TCLP (mg/L)**
Aldrin	1.4	0.14	0.5
Benzene	10	0.5	0.5
Carbon Tetrachloride		0.5	
Chlordane	2.5	0.25	0.03
Chlorobenzene			100
Chloroform			6
Cresols			200
2,4-Dichlorophenoxyacetic acid	100	10	10
DDT, DDE, DOD	1.0	0.1	
1,4-Dichlorobenzene			7.5
1,2-Dichloroethane			0.5
1,1-Dichloroethylene			0.7
2,4-Dinitrotoluene			0.13
Dieldrin	8	0.8	
Dioxin (2,3,7,8-TCDD)	0.01	0.001	
Endrin	0.2	0.02	
Heptachlor	4.7	0.47	0.008
Hexachlorobenzene			0.13
Hexachlorobutadiene			0.5
Hexachloroethane			3.0
Kepone	21	2.1	
Lindane	4	0.4	0.4
Methoxychlor	100	10	10
Methyl Ethyl Ketone			200
Mirex	21	2.1	
Nitrobenzene			2.0
Pentachlorophenol	17	1.7	100
Perchorate	10		
Polychlorinated Biphenyls (PCB's)	50	5	
Pyridine			5.0
Tetrachloroethylene			0.7
Toxaphene	5	0.5	0.5
Trichloroethylene (TCE)	2,040	204	0.5
2,4,5-TP (Silvex)	10	1.0	1.0
2.4,5-Trichlorophenol			400
2,4,6-Trichlorophenol			2.0
Vinyl Chloride			0.2

Continued.

THE DISTRICT DOES NOT ACCEPT WASTE THAT IS DEFINED AS HAZARDOUS UNDER RCRA or CCR Title 22.

For Special Projects requiring information from District Engineer,
contact David Ramirez, P.E.
at dramirez@mrwmd.org or 831-384-5313

ATTACHMENT #4

Hi Sean,

Soil accepted at MRWMD is put to beneficial reuse onsite as daily or intermediate cover. This material reduces the amount of virgin material otherwise needed to accomplish this task. MRWMD has specific requirements for this soil which include limits on the amount of contamination and debris that can be in the soil.

Thank you,
David I. Ramirez, P.E.
Senior Engineer
Monterey Regional Waste Management District
(831) 264-6910 (Direct)
(831) 384-5313 (Office)
(831) 384-3567 (fax)

ATTACHMENT #5

IT'S A SMALL PLANET, RECYCLE!

MRWMD's Materials Recovery Facility and recycling programs are designed to maximize diversion of recyclable materials. Since it opened, the MRF has diverted more than 1.5 million tons of recyclable and reusable materials from landfill disposal. As a result, MRWMD member jurisdictions have enjoyed some of the highest diversion levels in the State.

Materials Recovery Facility

The Materials Recovery Facility (MRF) is the centerpiece of the District's waste processing and diversion. The MRF receives commercial and "self-haul" vehicles carrying a wide range of construction and demolition material, landscaping trimmings and general refuse. More than 50% of the "mixed waste" that is received at the MRF is recycled, reused and diverted from landfill disposal.

The following materials are all processed at the MRF:

(Read More)

Buy Back Center

Located behind the Last Chance Mercantile, the District's Buy Back Center for CRV Beverage Containers will give you cash for your "CRV" beverage containers Mon.-Sat.

(Read More)

Construction And Demolition Recycling

Construction and demolition (C&D) debris makes up a significant portion of the waste stream. The MRF, designed to effectively process and divert the readily recyclable materials such as wood, metal, dry wall, and aggregate, helps contractors and builders meet new green building standards, as well as State (Cal Green) (link to) and municipal policies and ordinances. These new standards and requirements aim to boost the diversion rate for vs. disposal of these materials. See the C&D page for help on optimizing your load and tracking the diversion for your project.

Green Waste

Clean green waste such as landscape trimmings, brush, tree pruning, and grass clippings are received at the Materials Recovery Facility. The rate for these organic materials, if "clean" and free of contamination.

Clean Wood Waste

Unpainted wood is also accepted at a discounted rate. Wood must be free of contamination from mixed waste and may not include any treated or painted wood.

Mattresses

Mattresses and box springs are accepted at the Materials Recovery Facility for recycling. The cost charged to accept these items is the same the District pays to a recycler to take them away and reclaim wood, metal and fabric materials.

Appliances

The District charges $5 each for appliance that doesn't contain refrigerant and $20 each for appliances with refrigerant. Fees charged for appliances are used to recover the cost to remove mercury switches and refrigerant.

Tires

Tires received at MRWMD are delivered to recyclers in Hollister and the Bay Area where they are recycled into playground surfaces and agricultural products. Disposal fees are based upon size and number of tires.

MRWMD's Other Recycling Collection Programs

Monterey Regional Waste Management District

Service, Stewardship and Sustainability Since 1951

ATTACHMENT #6

GREEN WASTE (YARD WASTE) & WOOD WASTE ACCEPTANCE CRITERIA

KEEP THE "GREEN" CLEAN! Green waste can be converted into compost, energy and landscape material. By sorting and assuring clean loads you help the District maximize resource recovery of this material and save yourself the cost of the full disposal rate.

It is District's policy to accept loads of clean green waste at the rate of $30.00 per ton.
Examples of accepted wood waste are:

- tree limbs
- logs and beams less than 6 ft. in length and 1 ft. in diameter
- clean root balls of less than two feet across
- tree stumps* less than 1 ft. in diameter at the base
  *for stumps larger than this see table below
- construction/demolition lumber (untreated, unpainted accepted with nails)
- used pallets and crates
- unfinished wood furniture, fences and decks
- untreated wood roofing shingles/shakes (no tar paper, asbestos, or fiberglass)

* Disposal Fees for Oversized Stumps and Root balls:	
Stumps with bases in excess of 1 ft. or root balls in excess of 2 ft.	$5 for each foot in excess of these limits, plus the regular per ton rate
Stumps with bases or root balls more than 2-3 ft. in any dimension	$10 each, plus the regular per ton rate.
Stumps with bases or root balls more than 3-5 ft. in any dimension	$50 each, plus the regular per ton rate.
Stumps with bases or root balls more than 5 ft. in any dimension	$50 each, plus the "problem waste" rate at $90 per ton

Examples of accepted yard waste are:

• brush & shrub prunings	• ivy	• sawdust	• weeds
• Grass clippings	• pine needles and leaves	• sod	• woodchips

Loads containing unacceptable materials or loads mixed with refuse or recyclables are charged at the regular rate of $51.75 per ton. Examples of unacceptable materials and contaminants are:

• bones	• pampas grass	• rocks	• pressure treated or painted wood
• cacti	• plastics	• soil	• railroad ties (less than 6 feet)
• ice plant	• palm stalks and fronds		• treated poles, pier pilings (less than 6 ft.)
• succulents e.g. aloe vera	• trash		• veneer paneling / plywood

THE DISTRICT DOES NOT ACCEPT WASTE THAT IS DEFINED AS HAZARDOUS WASTE UNDER RCRA OR CCR TITLE

FOR MORE INFORMATION:
Please Contact: MRWMD Scale Supervisor, Jeannette Pagan at 831-384-5313

ATTACHMENT #7

- Compost
- Disposal
- Household Hazardous Waste
- Last Chance Mercantile
- Public Education
- Recycling
  - Beverage Container Buy Back Center
  - Construction & Demolition Recycling
  - Commercial & Residential Recycling
  - Electronics Recycling
  - Materials Recovery Facility
  - Special Event Recycling
- Renewable Energy
- Small Planet - School Education Program

Residential And Commercial Recycling

RETURN TO HOME

It is a Small Planet, Recycle!

14201 Del Monte Boulevard
Marina, CA 93933-1670
Phone: (831) 384-5313
Fax: (831) 384-3567

Hours
Map
Share

Construction And Demolition Recycling

Pay Less For Clean "Source Separated Loads"

The highest rates of recycling can be attained when you "source separate" materials at your job site, such as keeping a separate dumpster for clean concrete, wood, metal, soil, etc. Recycling construction and demolition materials at the MRWMD Materials Recovery Facility helps builders comply with California's CALGreen building requirements and meet the national LEED Building standards. MRWMD fee schedule offers discounted rates for clean loads containing source separated wood, concrete, asphalt, or soil.

Optimize Your Loads For Recycling

The MRWMD MRF uses a combination of mechanical and manual separation to process mixed waste and C&D materials as waste flows on a conveyor belt through the facility. To protect our employees, and to avoid materials that can become entangled in equipment, loads containing excessive amounts of the above materials will generally be directed to the landfill for disposal. To maximize diversion on the job site, allocate problem materials to their own dumpster.

To help ensure that your load is directed to the MRF by the MRWMD scale staff, try to keep the following problem materials out of your load:

- Fiberglass Insulation
- Large quantities of Romex cable or wire
- Ice Plant, Poison Oak

Tracking Your Diversion

We calculate MRF diversion on a monthly basis and you can see the actual diversion percentage published in our monthly Recycling Report. This report is presented to our Board of Directors each month and included on our website on the Board of Directors page.

Scale Receipt Is Your Proof Of Diversion

The MRWMD tracks diversion at the MRF on a monthly basis by recording the tonnage of material coming into the facility, the tonnage of material diverted, and the tonnage of material disposed. Diversion is not tracked on a load by load basis.

Scale receipt indicates material brought across the MRWMD scales and where it was directed.

- For Receipts labeled "MRF" we certify a min. 50% diversion for tonnage delivered on that receipt.
- Receipts indicating load went to "Green Waste" or "AC" (asphalt/concrete) are 100% diversion.
- Receipts indicating a load went to the landfill receive no diversion.

The "percent diversion – sort line" number reported monthly in the MRWMD Tonnage Report is the diversion percentage you can use for reporting on your projects. The USGBC has accepted this methodology for LEED projects locally.

If you require diversion certification, the MRWMD will provide the monthly diversion calculation for your load(s) that went to the MRF based on the month your load(s) were delivered. You can also obtain this information from your hauler.

Publications

Disposal Brochure