Construction Equipment Efficiency Plan

Transfer and Feed Water Pipelines

Garney Project #1115

Overview:

Garney Construction is committed to ensuring all work will be performed with equipment that meets or exceeds efficiency and emission requirements. By utilizing our fleet of all new equipment with modern emission, noise, and safety standards, our goal is to enable our crews to work in an efficient manner with minimal impact to the surrounding area. Garney is also enrolled in the California Air Resources Board Diesel Off-Road On-Line Reporting System (Calif ARB DOORS) which ensures all equipment is registered and in compliance with all California ARB regulations. The below items provide information on our equipment idling, maintenance, electrical sources, and general material routing information in regards to the Monterey Pipeline project.

Equipment Idling:

Garney Construction will require all operators to reduce heavy equipment idling onsite to a maximum of 5 minutes per the *California Air Resources Board* requirement on Heavy Duty Diesel Vehicles. As the equipment utilized on this project is new, it is equipped with an automatic shutoff function, where the equipment will automatically shutoff after 5 minutes of idling. This removes any issues with operator error on leaving equipment idling for longer periods.

Maintenance Program:

The Garney Construction project maintenance program starts with reduction of potential mechanical issues by utilizing new equipment (4 years or newer) for all heavy equipment utilized in our fleet. This ensures all equipment used is in compliance with emission (Tier 4) and noise regulations, and reduces the potential for mechanical issues which would decrease efficiency of the equipment. This also means that all of our equipment has modern remote diagnostic monitoring of the drivetrain, and will provide live updates for the project equipment via JDLink for John Deere equipment and Vision Link for CAT equipment. Greg Lutes, Superintendent, is the point of contact for this system, and he will monitor equipment for any maintenance or replacement of parts required. See attachment 1 for online diagnostic example.

Along with the equipment diagnostic reports, all operators are required by Garney to perform an inspection of the equipment and fill out a checklist prior to commencing work everyday. This provides a visual inspection of the equipment along with the remote maintenance system. Should the operator find any issues with the equipment, he is to note it on the checklist and inform the Forman or Superintendent. See Attachment 2 for Garney Equipment checklist.

Electrical Sources:

Due to the linear nature of this project, it is difficult to effectively utilize electrical resources from the power grid for operations during the installation of the pipeline. However, Garney will commit to using electrical resources as wherever possible, including charging of monitoring equipment, battery packs, and any minor tools which run on battery power. This equipment will be charged at the end of shift daily either at the Garney construction office or at the yard in our conex boxes. However, the use of generator will be required for any corded equipment onsite.

Material Routing:

Material to be brought onsite:
In order to ensure pipe and other material for use on the project is transported in an efficient manner, Garney will utilize 3 yards along the project alignment to reduce unnecessary trucking and moving of pipe and equipment. Yards are distributed along the alignment as follows:

South Section of Work – Lightfighter at First Street and the CalAM La Playa Yard

Middle Section of Work – Yard area TBD

North Section of Work – Jefferson Ranch

In addition, Garney intends to stage pipe adjacent to construction along the alignment as allowable in order to minimize additional trucking hauling of materials.

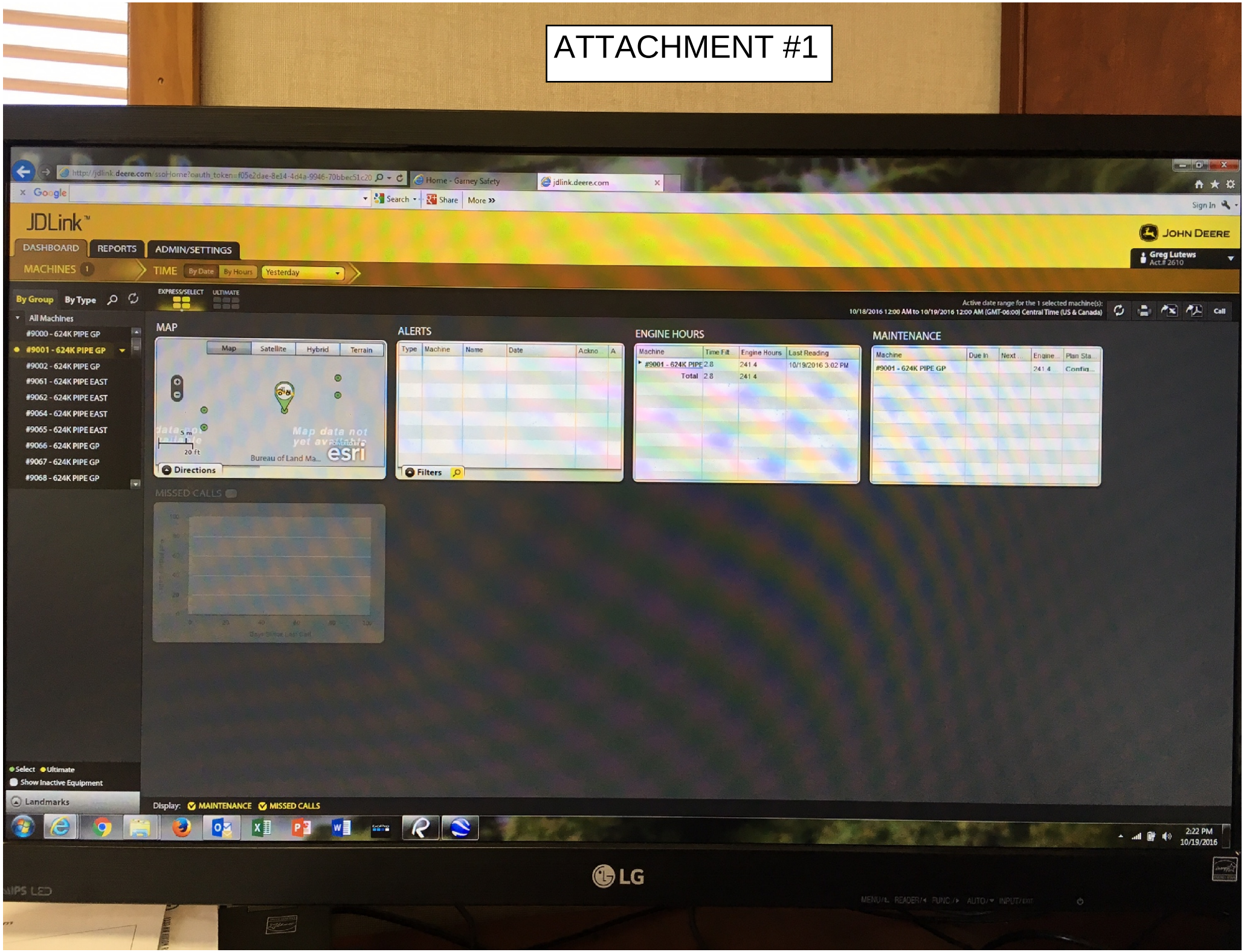
In addition, all truck routes to the project will utilize freeways and arterial routes prior to use of primary and secondary roads. This will allow for more efficient movement of material and reduce congestion issues in local neighborhoods.

Material to be Offhauled:
Offhaul of material will be performed utilizing an SBE trucking company *Arroyo Trucking, Inc*. Arroyo Trucking has been informed to minimize traffic congestion on minor streets along the alignment, as trucks will move to primary streets and arterials as efficiently as possible. All non-hazardous material and any petroleum contaminated soils will be removed to Monterey Regional Waste Management District (Waste acceptance criteria can be found in Attachment 3). This site allows for disposal of materials in the local area to minimize travel.

Any material found to be classified as hazardous will be first tested for levels, and sent to the appropriate hazmat site (to be determined once samples are analyzed).

Material in areas outside of the roadways is anticipated to be left onsite and blended therefore no trucking/road impacts will occur.

ATTACHMENT #1



ATTACHMENT #2

Daily Equipment Inspection

(Please **TYPE or PRINT** All Information)

Instructions: Use this form to document the daily walk around inspection of all equipment on the job site. This inspection sheet is to be completed by the assigned employee owner. Upon the completion at the end of the week please file the completed sheet on-site.

RENTAL EQUIPMENT	☐	COMPANY EQUIPMENT	☐

PROJECT NAME		JOB NUMBER	
RENTAL COMPANY NAME		OPERATOR'S NAME	
EQUIPMENT DESCRIPTION		SIGNATURE	
UNIT NUMBER		LAST OIL CHANGE (HOURS OR MILES)	
HOURS		WEEK ENDING	

(MARK BOX IF OK)	N/A	S	M	T	W	T	F	S	(DESCRIBE REPAIRS NEEDED OR DAMAGE)
ENGINE OIL LEVEL									
RADIATOR & COOLANT									
HYDRAULIC OIL LEVEL									
TRANSMISSION OIL LEVEL									
AIR FILTER RESTRICTION INDICATOR									
SERVICE & PARK BRAKE									
STEERING									
FIRE EXTINGUISHER									
BACK-UP ALARM									
TIRES (SIDEWALL CUTS)									
CLUTCHES									
BELTS									
BATTERY & ALTERNATOR									
HYDRAULIC HOSES & FITTINGS									
TRACK ROLLERS									
TRACK ADJUSTMENT									
CHAINS & SPROCKETS									
BUCKET									
TEETH & CUTTING EDGES									
CRACKS OR MISSING HARDWARE									
GREASE FITTINGS									
CONTROLS FOR PROPER OPERATION									
GAUGES & WARNING LIGHTS									
INNER AIR FILTER									
OUTER AIR FILTER									
EQUIPMENT (IN & OUT) CLEANLINESS									

DAILY HOURS REPORTING:	Monday		Tuesday		Wednesday		Sunday	
	Thursday		Friday		Saturday			

Revision Date: 01/01/2015

SP File - 07.E.i - _____.WE. __.__.__
Equip # (mm.dd.yy)

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.

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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