1.0 STORM WATER BEST MANAGEMENT PRACTICES

The goal of the SWPPP is to identify potential pollutants and develop activities or structural improvements (BMPs) to eliminate or reduce discharges of these pollutants to storm water and, thereby, improve storm water runoff quality. This section identifies BMPs implemented at MBPP to address the potential pollutants. The BMPs are discussed in the following sections and include non structural BMPs, such as good housekeeping procedures, including those for non-storm water discharges; preventative maintenance, including vehicle and equipment fueling, maintenance, and washing; spill response; material handling and storage; employee training; waste handling/recycling; record keeping and reporting; erosion control and site stabilization; frequent inspections; and quality assurance; as well as structural BMPs, such as overhead coverage; retention ponds; control devices; secondary containment structures; and treatment devices. BMPs will be updated as appropriate to comply with any additions or changes to General Permit requirements.

1.1 NON-STRUCTURAL BMPS (SECTION A.8.a)

Non-structural BMPs consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting storm water discharges and authorized non–storm water discharges. They are generally considered low technology, cost-effective measures. All possible non-structural BMP options will be considered before additional structural BMPs (see Section 1.2 below) are implemented. The following non-structural BMPs will be implemented at MBPP.

1.1.1 Good Housekeeping (Section A.8.a.i)

Good housekeeping practices are dictated by MBPP's Operating Orders for combustible material and rag management; floor, stairway, and platform cleanliness; aisles and exit obstructions; and material and supplies hazards and management. The MBPP staff will utilize the Operating Orders for direction and management of future good housekeeping efforts. Additional housekeeping items are associated with daily operator inspections and weekly SPCC inspections and routines such as an observation of facility drainage features. These inspections will be sustained. Lastly, existing good housekeeping efforts such as street and parking lot sweeping; appropriate management and disposal of waste materials; and storm drain inspection and maintenance will continue to be implemented.

Storm water drainage system cleaning and maintenance will be performed regularly. Sediment, debris, and trash will be removed from drainage features immediately upon their observation. Repairs will be conducted to the drainage system in a manner that prevents the introduction of pollutants as a result of the repair. Inspection forms and routines will be altered as necessary if it is determined that certain drainage features require greater attention.

Sandblasting is performed during dry, non-windy weather conditions. Records are kept of each instance and certified sand is used that reduces the amount of dust generated.

1.1.1.1 Non-Storm Water Discharges

To prevent or reduce non-storm water discharges, the following systems and practices will be implemented:

- Sanitary waste will be conveyed to the City of Morro Bay Wastewater Treatment Plant for disposal.

- Outdoor washing of vehicles or equipment on-site will be prohibited.
- Outdoor parking and storage areas will be swept and not washed down.
- Water conservation practices will be utilized, such as preventing irrigation runoff.
- Non-potable water line or tank flushes will be collected for off-site disposal by a licensed waste disposal subcontractor.
- Transformer containments will be provided to control potential spills or leakage of transformer oil from the main and auxiliary transformers.
- Daily site inspections will be conducted to detect unauthorized discharges and/or connections, broken water lines, leaks, etc.

In the event an unauthorized non–storm water discharge is discovered, the discharge will be recorded using Dynegy Form 2 and eliminated. All non-storm water discharges will be evaluated for contribution of pollutants to the storm water conveyance system. Spill response procedures will be followed.

Future contracts with pest management contractor will include provisions requiring the use of certified applicators. Additionally, provisions will be included within contracts requiring pest management contractors to comply with all pertinent federal, state, local, and facility regulations and requirements.

1.1.2 Preventive Maintenance (Section A.8.a.ii)

Recurring and preventive maintenance is managed at MBPP with a computer-based work management system that is used to track equipment maintenance schedules. This management tool minimizes the potential for equipment breakdowns and potential related releases to sumps, floors, and other areas. Additional preventive maintenance procedures that minimize potential contact of significant materials with storm water will be added to the SWPPP as needed.

1.1.2.1 Vehicle and Equipment Fueling, Maintenance, and Washing

All on-road vehicles will be maintained and washed at off-site commercial facilities. All MBPP vehicles will be regularly inspected and maintained in accordance with manufacturer's recommendations and MBPP procedures. The propane-fueled forklifts will be stored and serviced indoors and are not subject to storm water exposure except during occasional outdoor use during storm events. The crane will be stored and maintained indoors; therefore it is not typically subject to storm water exposure. Vehicles and/or equipment observed to be leaking fluids will be stored indoors until repairs are completed.

Vehicle fueling will be conducted at the designated vehicle fueling area located adjacent to Firehouse #1. Leaks and drips will be routinely spot cleaned using absorbent pads or other dry absorbent materials. MBPP staff will be trained on the proper use of the fueling area including spill and leak clean-up procedures. A fueling truck is used to fuel equipment throughout the site. The fueling truck is attended by MBPP personnel at all times. Storm drains are protected from fuel spills and leaks with temporary berms or are covered during fueling.

1.1.3 Spill Response (Section A.8.a.iii)

Any spilled material, dry or liquid, will be promptly contained, collected and properly disposed of. Spill and cleanup materials will be stocked at all times and will be stored throughout the facility. Employees will be trained on the proper use and disposal of spill and cleanup materials.

A complete list of spill prevention and response measures for areas where significant materials have the potential to enter the storm water collection system is presented in the FEP, Business Plan, and SPCC Plan. MBPP will maintain necessary equipment, controls, and personnel training for spill containment and cleanup. Internal and external reporting procedures for spills/releases of significant materials at MBPP are established and will be used as necessary.

Spill containment and cleanup materials are stocked in the Hazardous Material Spill Response Shed located along the southwest corner of the Main Power Building . Any and all materials spilled within the chemical loading area during shipping and receiving activities will be immediately cleaned up and properly disposed of in consultation with the MBPP Environmental Scientist.

A complete description of the Spill Prevention and Response Program for potential storm water pollution source areas is presented in the MBPP SPCC Plan, in accordance with 40 CFR 112 requirements. Specific material handling procedures, storage requirements, and cleanup equipment and procedures are described in the SPCC Plan. MBPP maintains the necessary equipment, controls, and personnel training for the containment and cleanup of spills. Internal reporting procedures for spills/releases of significant materials at this facility are established.

1.1.4 Material Handling and Storage (Section A.8.a.iv)

A number of materials handling and storage practices will be employed at MBPP to minimize contact of significant materials with storm water. MBPP will maintain a comprehensive and up-to-date inventory of all hazardous and non-hazardous chemicals and other substances used at the facility.

Containers will be stacked and stored according to manufacturers' instructions, shelf life will be monitored, and sufficient aisle space will be provided for transfer and inspection. Containers will be stored on pallets to prevent corrosion; loading and unloading of chemicals, oil, or other such materials will take place under supervision of MBPP personnel in areas designated for these activities. All materials stored in bags, drums, containers, and stockpiles will be kept organized and properly labeled for easy identification. Oil and other petroleum products are handled in accordance with requirements of the FEP, Business Plan, and SPCC Plan.

Chemicals will be stored in the MBPP warehouse, in dedicated tanks or other containers, or in other protected/roofed points of use on the site. Where feasible, oil or chemical containers will be stored indoors in temperature-controlled areas. Chemical and hazardous material containers are labeled with the chemical/product name, expiration date, and health hazards and the containers will be compatible with the materials stored in them. Material Safety Data Sheets (MSDSs) will be readily available in the MBPP library room or available through 3E (1-800-451-8346).

Exterior tanks are provided with containment sufficient to control spills or leakage of tank contents, or for the largest tank within a common containment, plus freeboard for precipitation. Exterior, unprotected exposure of chemicals to precipitation is avoided except to the extent that it is unavoidable during active use of materials or chemicals or during active delivery or disposal loading operations. Spill control and cleanup materials are available at all times at delivery and storage areas.

Loading and unloading of chemicals and petroleum products occurs in designated areas where materials cannot enter the storm water conveyance system. All loading/unloading activities will be attended by contractor and/or MBPP operating personnel. The loading/unloading areas and responsible personnel will be properly prepared for control of potential spills. Loading/unloading areas will be provided with curbs, temporary absorbent pads or dikes/pigs, or other appropriate means to contain possible spills. Any and all spills will be aggressively and expeditiously cleaned.

Standard Operating Procedures were developed at MBPP for the process of accepting liquid materials delivery to prevent pollution discharge to the storm water conveyance system. The procedures will be adhered to and are described as follows:

- Liquid materials will be delivered to the facility by California Department of Transportation-certified vehicles and drivers.
- The main storm water system isolation valve located near the main entrance shall be closed.
- Storm drains in the delivery area will be covered with mats, dikes, berms, etc.
- MBPP staff shall be present during all deliveries and radio contact shall be maintained with the Control Room.

Pesticide chemicals will be stored and mixed off-site by the MBPP pest management contractor.

Materials, such as various process chemicals, used at the MBPP are stored in the Warehouse and Main Power Building, in suitable indoor or outdoor enclosures, or in tanks at or near the points of use of the chemicals. Exterior tanks are provided with containment sufficient to control spills or leakage of tank contents, or for the largest tank within a common containment, plus freeboard for precipitation. Exterior, unprotected exposure of chemicals to precipitation is avoided except to the extent that it is unavoidable during active use of materials or chemicals or during active delivery or disposal loading operations. Spill control and cleanup materials are available at all times at delivery and storage areas.

Hazardous materials storage areas are provided with secondary containment or will be otherwise designed and managed to contain spills. Hazardous wastes are shipped from the HWSB by licensed and certified transport trucks within the loading area in front of the HWSB which is exposed to storm water. In the event that waste is inadvertently spilled in this area, it will be cleaned immediately and disposed of in accordance with all federal, state, and local regulations. The HWSB loading area is routinely inspected.

1.1.5 Employee Training (Section A.8.a.v)

The General Permit requires that employees responsible for implementing the plan receive training. At MBPP the Environmental Scientist will meet periodically (at least annually) with the MBPP Training Coordinator to identify training needs and to provide training for operating personnel for implementing the SWPPP, maintaining storm water pollution controls, and the SPCC Plan. The MBPP Training Coordinator will document SWPPP-related training in employee training records. Storm water–related training will be held (1) within 3 months of employment for new hires and (2) annually for current MBPP staff. Training will address the following topics:

- Function and membership of the SWPPP Team;
- Risk assessment for potential sources of storm water pollution;

- Sediment and erosion control features and practices;
- Preventive maintenance requirements;
- Good housekeeping and material management practices to control storm water pollution;
- Spill prevention and response procedures and responsibilities;
- Characteristics of various hazardous and non-hazardous materials or wastes expected to be present on the site;
- Site inspection practices and requirements; and
- Potential sources for non–storm water discharges to the storm water management system and relevant controls.

The pest management contractors will be required to provide applicator certification credentials prior to conducting any pesticide management at MBPP. The plant Environmental Scientist will provide site-specific training to pesticide applicators as necessary to assure application efforts do not threaten storm water quality.

1.1.6 Waste Handling/Recycling (Section A.8.a.vi)

Any trash found on-site during inspections will be collected and disposed of properly. Trash and recyclable materials are collected and stored outdoors in roll-off bins throughout the facility. The bins are inspected on a daily basis to ensure they are at capacity. Collected materials will be removed by an outside contractor when the bins are full. Universal wastes are stored indoors at various accumulation areas throughout the site and removed for recycling once accumulated. Storm drain inlet filters will protect against the discharge of trash, oil, and grease into the main storm drain conveyance system.

Hazardous waste is stored at the Hazardous Waste Storage Building until it is removed by a licensed contractor within the permitted holding time.

1.1.7 Recordkeeping and Internal Reporting (Section A.8.a.vii)

Recordkeeping will be conducted with the use of logs, forms, and reports found in Appendices B, C, D, and E of the SWPPP. The use of these is specifically addressed within Sections 2.5, 5.0, 6.0, and 7.0 of the SWPPP. All records and forms of internal reporting will be maintained at MBPP by the MBPP Environmental Scientist for a minimum of five years from the time of generation.

PG&E Monthly Switchyard Reports are provided to Dynegy, Morro Bay. These reports describe the condition of the switchyard including, but not limited to a review of general conditions, buildings and switchboards, batteries, generators, mobile equipment, high-voltage fuses, surge arrestors, transformers, circuit breakers, capacitors, switches, reactors, condensers, aboveground storage tanks, portable plastic storage tanks, the mobile oil tanker trailer, piping and oil transfer equipment, spill basins, and catch basins.

1.1.7.1 Storm Water Pollution and Spill Incident Inspection and Reporting

Any incidents that result in off-site discharges of pollutants in storm runoff from the MBPP will be documented using the applicable Industrial Storm Water Management forms and in incident report forms.

In addition, a list of any significant spills of toxic or hazardous substances on-site that create significant potential for off-site discharges will be included in the SWPPP and will include documentation of any releases in excess of Clean Water Act Section 311 or CERCLA Section 102 reportable quantities (RQs) (40 CFR Part 117, 40 CFR Part 302).

1.1.8 Erosion Control and Site Stabilization (Section A.8.a.viii)

The following management techniques will be utilized at MBPP to minimize erosion and sediment transport from the site:

- Unpaved areas will be stabilized with a combination of compacted base material, gravel, and vegetation.
- Operating/process areas and roads will be covered by asphalt or concrete. Curbs, gutters and swales shall be in place to direct storm water away from unpaved areas.

During any major modifications to the site, an erosion control plan will be prepared by a qualified individual as a part of the construction SWPPP. The construction SWPPP, in accordance with the *NPDES General Permit for Storm Water Discharges Associated with Construction Activity, Water Quality Order 99-08-DWQ*, will specify erosion control measures that will be implemented during construction to minimize soil disturbance and any potential off-site discharges of sediment.

1.1.9 Inspections (Section A.8.a.ix)

Site inspections are performed at MBPP under the direction of the SWPPP Team and/or EH&S Department to minimize the contact of significant materials with storm water discharges. Inspections are tracked and the results are retained on-site to ensure appropriate and timely response. Inspections are documented with the MBPP Industrial Storm Water Management Forms and applicable SPCC Plan inspection forms. The MBPP inspection program is described as follows:

- Non-documented routine inspections are conducted to assure integrity of structural and non-structural controls, preventive maintenance activities, vehicle management practices, and housekeeping practices.
- Monthly inspections are completed year-round pursuant to the MBPP SPCC Plan.
- Non–storm water discharges are inspected regularly year-round.
- Storm water runoff observations are performed during runoff events as identified in Section 7.0 of the SWPPP.
- Annual Comprehensive Site Compliance Evaluation inspections are conducted to verify that the SWPPP, site maps, and potential pollutant sources are accurate and BMPs are and fully implemented and effective.

A detailed inspection will be conducted in response to any reported problem involving control of runoff from the site, or quarterly, as appropriate. Results of corrective actions and general site inspections will be recorded on the appropriate Industrial Storm Water Management Forms. The inspection form will be signed and dated by the inspecting personnel, submitted to the Plant Environmental Scientist for review,

and filed. Any deficiency in SWPPP implementation, control of potential pollutants, or control of runoff will be noted on the inspection form and brought to the attention of the MBPP Environmental Scientist when the inspection form is submitted.

The MBPP Environmental Scientist will arrange for applicable corrective actions in consultation with the SWPPP Team, as appropriate. All corrective actions and revisions to the SWPPP will be addressed in a timely manner, but under no circumstance more than 90 days following the inspection. When corrective actions have been completed, the inspection form will be updated and initialed by the Plant Environmental Scientist or his designee to confirm correction of the problems noted.

1.1.9.1 Accumulated Storm Water Inspection and Discharge

The process for inspecting and discharging accumulated secondary containment water is as follows.

Storm water collected within secondary containment structures and sumps will be visually inspected for signs of pollution, such as cloudiness, color, odor, trash, etc. If there is reason to suspect that the water has come into contact with non-visible pollutants, samples shall be collected and analyzed for the suspected constituents. If the water is determined to be clean, it shall be discharged to grade or to the storm water conveyance system. If the water is polluted, it shall be pumped out and disposed of as process water to the OWS or treated as hazardous waste if it qualifies as such.

The Containment Structure Storm Water Release Procedures Worksheet will be completed prior to any discharge of accumulated waters. If sampling is necessary, coordinate with the plant Environmental Scientist.

1.1.10 Quality Assurance (Section A.8.a.x)

The Annual Comprehensive Site Compliance Evaluation will be utilized to ensure that all elements of the SWPPP and Monitoring and Reporting Program are adequately conducted. In the event a component of the SWPPP or Monitoring and Reporting Program is deficient or in violation of the General Permit, appropriate adjustments and revisions will be made. Revisions to the SWPPP or BMP implementation will be addressed in a timely manner, but under no circumstance more than 90 days following the inspection.

1.2 STRUCTURAL BMPS (SECTION A.8.b)

If non-structural BMPs identified in Section 1.1 are deemed ineffective, structural BMPs will be considered. Structural BMPs consist of structural devices that reduce or prevent pollutants in storm water discharges and authorized non–storm water discharges. A list of structural BMPs currently implemented at MBPP is provided below.

1.2.1 Overhead Coverage (Section A.8.b.i)

The majority of significant materials and facility activities which could contribute pollutants to storm water have overhead coverage. These areas include the HWSB, Main Power Building, Sandblast Facility, Evaporator, Firehouse, and the Hydrazine Storage Building. Additionally, storm water drainage from the roofs of these buildings is conveyed to the MSD outfall through a series of gutters, swales, drains, and subsurface piping to prevent potential contact with pollutants.

1.2.2 Retention Ponds (Section A.8.b.ii)

The former tank farm area has a series of earthen berms which prevents the discharge of storm water from this area. 4 spill basins also exist, three of which are located on PG&E property (Spill Basin #1, #3, and #4). Spill Basin #2 is located on MBPP property. These basins retain storm water until its release by PG&E personnel.

1.2.3 Control Devices (Section A.8.b.iii)

Gate valves are present at various locations in the storm water conveyance system and also in the point at which storm water is discharged from the facility (also the storm water sample collection point) to prevent the release of pollutants off-site in the event of a spill, leak, sediment release, etc. Control devices are manually operated and will only be opened when it can be determined that the quality of water within the collection system is adequate for discharge off-site.

1.2.4 Secondary Containment Structures (Section A.8.b.iv)

Permanent secondary containment structures are in place around all outdoor hazardous fluid storage tanks for the purpose of collecting any leaks or spills. Permanent berms have been installed around the OWS to collect any leaks or spills. Temporary containments will be used as required to prevent impacts to storm water during operation and maintenance activities.

1.2.5 Treatment (Section A.8.b.v)

Process wastewater is discharged to the OWS and is isolated from the storm water conveyance system. Waste potable water will be discharged to the sanitary sewer system or disposed of via other appropriate measures.

Drop inlet filters have been installed in storm drains that have the potential to receive oil and grease and rust particulate from surrounding areas. In addition, custom sediment storm drain filters were developed and installed by MBPP to further protect storm drains in high risk of sediment deposition. These BMPs will be inspected weekly, cleaned quarterly, and maintained as necessary.