

SECTION A - CONSTRUCTION PLAN ELEMENTS

A1	PLAN INDEX - SEE BELOW
A2	17X17' PLAT - ATTACHED
A3	PROJECT NARRATIVE - THIS IS A PROPOSED 200,000 SF WAREHOUSE W/ PARKING AND ACCESS DRIVE ON APPROXIMATELY 26.2 ACRES.
A4	VICINITY MAP - SEE SHEET C100
A5	LEGAL DESCRIPTION - PART OF SW ¼ OF SECTION 23 - TOWNSHIP 18 NORTH - RANGE 5 EAST, BUCK CREEK TOWNSHIP, HANCOCK COUNTY, INDIANA.
	LAT: 39°48'49"N LONG: 85°56'32"W
A6	LOCATION OF ALL LOTS AND PROPOSED SITE IMPROVEMENTS - SEE SITE PLAN SHEET C201-C2021
A7	HYDROLOGIC UNIT CODE (14 DIGIT) - 05120204070020
A8	NOTATION OF ANY STATE OR FEDERAL WATER QUALITY PERMITS - 401 WATER QUALITY CERTIFICATION (IDEM); NONE
	SECTION 404 PERMIT (USACE); NONE
	CONSTRUCTION IN A FLOODWAY (INDNR); NONE
A9	SPECIFIC POINTS WHERE STORMWATER DISCHARGE LEAVES SITE - SITE DRAINS INTO PROPOSED STORM SEWER PIPE NETWORK AND DISCHARGES TO EXISTING DETENTION POND ALONG C.R. 200 N. SEE GRADING AND UTILITY PLAN SHEETS C301-C401 FOR MORE INFORMATION.
A10	LOCATION AND NAME OF WETLANDS, LAKES AND WATER COURSES ON AND ADJACENT TO SITE - SEE SITE DEVELOPMENT PLAN SHEET C101 FOR MORE INFORMATION
A11	IDENTIFICATION OF ALL RECEIVING WATERS- BUCK CREEK
A12	IDENTIFICATION OF POTENTIAL DISCHARGE TO GROUND WATER - NONE KNOWN
A13	100 YEAR FLOODPLAINS, FLOODWAYS, AND FLOODWAY FRINGES - NONE
A14	PRE-CONSTRUCTION AND POST-CONSTRUCTION ESTIMATE OF PEAK DISCHARGE 10 YEAR PRE-CONSTRUCTION PEAK RATE = X CFS ALLOWABLE 10 YEAR X CFS 100 YEAR POST-CONSTRUCTION PEAK RATE =X CFS ALLOWABLE 100 YEAR X CFS
A15	ADJACENT LAND USES: NORTH: COMMERCIAL SOUTH: AGRICULTURAL EAST: COMMERCIAL WEST: AGRICULTURAL
A16	CONSTRUCTION LIMITS - STORMWATER POLLUTION PREVENTION PLAN, SHEET C501-502
A17	IDENTIFICATION OF EXISTING VEGETATIVE COVER - SEE ALTA SURVEY
A18	SOILS MAP W/ SOIL DESCRIPTIONS AND LIMITATIONS - SEE COVER SHEET C100
A19	LOCATIONS, SIZE & DIMENSIONS OF PROPOSED STORMWATER SYSTEMS - SEE GRADING AND UTILITY PLAN SHEETS C301-C401
A20	PLANS FOR OFF-SITE CONSTRUCTION ACTIVITIES - NONE
A21	LOCATIONS OF PROPOSED SOIL STOCKPILES AND/OR BORROW/DISPOSAL AREAS - SEE PRE-CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN SHEET C201
A22	EXISTING SITE TOPOGRAPHY - SEE TOPOGRAPHIC SURVEY SHEETS S101
A23	PROPOSED FINAL TOPOGRAPHY - SEE SITE DEVELOPMENT PLANS SHEETS C301
A24	INDIVIDUAL IN CHARGE OF SWPPP IMPLEMENTATION - SEE PLAN NOTE 13 ON SHEET C501

SECTION B - SWPP - CONSTRUCTION PHASE

B1	DESCRIPTION OF POTENTIAL POLLUTANT SOURCES - POTENTIAL POLLUTANTS FROM CONSTRUCTION ACTIVITY SUCH AS OIL, GREASE, ANTIFREEZE, GASOLINE AND DIESEL FUEL FROM CONSTRUCTION EQUIPMENT; SOIL EROSION; FERTILIZER AND PESTICIDES FROM LANDSCAPING.
B2	SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION RELATIVE TO LAND DISTURBING ACTIVITIES: 1. SEE SHEET C503 FOR CONSTRUCTION SEQUENCING.
B3	CONSTRUCTION ENTRANCE - SEE STORMWATER POLLUTION PREVENTION PLAN SHEET C502 FOR LOCATION AND SHEET C503 FOR CONSTRUCTION ENTRANCE DETAILS AND SPECIFICATIONS.
B4	SEDIMENT CONTROL PLAN FOR SHEET FLOW AREAS - SEE STORMWATER POLLUTION PREVENTION PLAN SHEET C501-502.
B5	SEDIMENT CONTROL PLAN FOR CONCENTRATED FLOW AREAS - SEE STORMWATER POLLUTION PREVENTION PLAN SHEET C501-C502.
B6	STORM SEWER INLET PROTECTION MEASURE LOCATIONS AND SPECS - SEE STORMWATER POLLUTION PREVENTION PLAN SHEET C501-C5021 FOR LOCATIONS AND SHEET C503 FOR CONSTRUCTION DETAILS AND SPECIFICATIONS.
B7	RUNOFF CONTROL MEASURES - SEE STORMWATER POLLUTION PREVENTION PLAN SHEET C501-502 FOR LOCATIONS AND SHEETS C503 FOR CONSTRUCTION DETAILS AND SPECIFICATIONS.
B8	STORM WATER OUTLET PROTECTION SPECS - SEE STORMWATER POLLUTION PREVENTION PLAN SHEET C501-502 FOR LOCATIONS AND SHEET C503 FOR CONSTRUCTION DETAILS AND SPECIFICATIONS.
B9	GRADE STABILIZATION STRUCTURE LOCATIONS AND SPECS - SEE STORMWATER POLLUTION PREVENTION PLAN SHEETS C501-502 FOR LOCATIONS AND SHEETS C503-C504 FOR CONSTRUCTION DETAILS AND SPECIFICATIONS.
B10	STORMWATER QUALITY CONSTRUCTION DETAILS - SEE STORMWATER POLLUTION PREVENTION PLAN SHEETS C503 FOR DETAILS AND C504 FOR SPECIFICATIONS.
B11	TEMPORARY SURFACE STABILIZATION METHOD FOR EACH SEASON - SEE SEASONAL SOIL PROTECTION CHART SHEET C503
B12	PERMANENT SURFACE STABILIZATIONS - SEE STORMWATER POLLUTION PREVENTION PLAN SHEET C501-C502 FOR LOCATIONS AND SHEETS C503 FOR CONSTRUCTION DETAILS AND SPECIFICATIONS.
B13	MATERIAL HANDLING AND SPILL PREVENTION PLAN: PURPOSE:

THE INTENTION OF THIS SPILL PREVENTION, CONTROL AND COUNTERMEASURES (SPCC) IS TO ESTABLISH THE PROCEDURES AND EQUIPMENT REQUIRED TO PREVENT THE DISCHARGE OF OIL AND HAZARDOUS SUBSTANCES IN QUANTITIES THAT VIOLATE APPLICABLE WATER QUALITY STANDARDS, CAUSE A SHEEN UPON OR DISCOLORATION OF THE SURFACE OF NAVIGABLE WATERS OR ADJOINING SHORELINES, OR CAUSE SLUDGE OR EMULSION TO BE DEPOSITED BENEATH THE SURFACE OF THE WATER OR ADJOINING SHORELINES. THE PLAN ALSO ESTABLISHES THE ACTIVITIES REQUIRED TO MITIGATE SUCH DISCHARGES (I.E., COUNTERMEASURES) SHOULD THEY OCCUR.

POLLUTANT: MEANS POLLUTANT OF ANY KIND OR IN ANY FORM, INCLUDING BUT NOT LIMITED TO SEDIMENT, PAINT, CLEANING AGENTS, CONCRETE WASHOUT, PESTICIDES, NUTRIENTS, TRASH, HYDRAULIC FLUIDS, FUEL, OIL, PETROLEUM, FUEL OIL, SLUDGE, OIL REFUSE, AND OIL MIXED WITH WASTES OTHER THAN DREDGED SOIL.

DISCHARGE:
INCLUDES BUT IS NOT LIMITED TO, ANY SPILLING, LEAKING, PUMPING, POURING, EMITTING, EMPTYING, OR DUMPING.

NAVIGABLE WATERS:

MEANS ALL WATERS OF THE UNITED STATES THAT ARE CONNECTED WITH A NAVIGABLE STREAM, LAKE, OR SEA. [NOTE: THIS DEFINITION IS USUALLY INTERPRETED TO MEAN ANY WASTEWATER(EVEN NORMALLY DRY WASH OR STORM SEWER) THAT EVENTUALLY DRAINS INTO A NAVIGABLE STREAM].

PLAN REVIEW AND AMENDMENTS:

THIS PLAN SHALL BE REVIEWED AND/OR AMENDED, IF NECESSARY, WHENEVER THERE IS A CHANGE IN THE DESIGN OF THE SITE, CONSTRUCTION, OPERATION, OR MAINTENANCE WHICH MATERIALLY AFFECTS THE SITE'S POTENTIAL FOR THE DISCHARGE OF REGULATED MATERIAL.

PREDICTION OF POTENTIAL SPILLS:

1. NEAREST NAVIGABLE WATER: LITTLE EAGLE CREEK
2. POSSIBLE SPILL SOURCES (DURING AND POST CONSTRUCTION): VEHICULAR SOURCES SUCH AS LEAKING FUEL OR OIL, BRAKE FLUID, GREASE, ANTIFREEZE, CONSTRUCTION TRASH AND DEBRIS, BIOLOGICAL AGENTS FOUND IN TRASH AND DEBRIS, FERTILIZERS, HOUSEHOLD ITEMS INCLUDING BUT NOT LIMITED TO CLEANING AGENTS, CHEMICALS, PAINT, HERBICIDES AND PESTICIDES.
3. GROUNDWATER CONTAMINATION: THIS FACILITY MAINTAINS NO ABOVE GROUND OR UNDER GROUND STORAGE TANKS. THEREFORE, IT IS FELT THAT THERE IS LITTLE OR NO RISK OF POSSIBLITY OF POST CONSTRUCTION GROUNDWATER CONTAMINATION.

ALERT PROCEDURES FOR SPILLS:

1. ANY PERSONNEL OBSERVING A SPILL WILL IMMEDIATELY INSTIGATE THE FOLLOWING PROCEDURE:
 - a.) DIALING "0" FROM ANY TELEPHONE.
 - b.) NOTIFY THE APPROPRIATE EMERGENCY PERSONNEL.
2. THE EMERGENCY COORDINATOR WILL THEN TAKE THE FOLLOWING ACTIONS:
 - a.) BARRICADE THE AREA ALLOWING NO VEHICLES TO ENTER OR LEAVE THE SPILL ZONE.
 - b.) NOTIFY THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, OFFICE OF EMERGENCY RESPONSE BY CALLING THE APPROPRIATE TELEPHONE NUMBER:
OFFICE: 317-233-7745
TOLL FREE: 800-233-7745

ALSO THE NATIONAL RESPONSE CENTER AT 800-424-8802 AND PROVIDE THE FOLLOWING INSTRUCTIONS:

- TIME OF OBSERVATION OF THE SPILL
- LOCATION OF THE SPILL
- IDENTITY OF MATERIAL SPILLED
- PROBABLE SOURCE OF THE SPILL
- PROBABLE TIME OF THE SPILL
- VOLUME OF THE SPILL AND DURATION
- PRESENT AND ANTICIPATED MOVEMENT OF THE SPILL
- WEATHER CONDITIONS
- PERSONNEL AT THE SCENE
- ACTION INITIATED BY PERSONNEL
- c.) NOTIFY THE ZIONSVILLE FIRE DEPARTMENT PHONE: 91-1
- d.) NOTIFY THE BOONE COUNTY SURVEYORS OFFICE 317-483-4444
- e.) NOTIFY THE ASA DEPARTMENT OF CODE ENFORCEMENT AT 317-327-8700
- f.) NOTIFY THE ZIONSVILLE POLICE DEPARTMENT PHONE: 91-1
- g.) NOTIFY WASTE RECOVERY CONTRACTOR, MAINTENANCE PERSONNEL OR OTHER CONTRACTUAL PERSONNEL AS NECESSARY FOR CLEANUP.
- h.) COORDINATE AND MONITOR CLEANUP UNTIL THE SITUATION HAS BEEN STABILIZED AND ALL SPILLS HAVE BEEN ELIMINATED.
- i.) COOPERATE WITH THE IDEM-GER OR PROCEDURES AND REPORTS INVOLVED WITH THE EVENT.

CLEANUP PARAMETERS:

1. THE OWNER SHALL BE CONTINUALLY KEPT INFORMED, MAINTAIN LISTS OF QUALIFIED CONTRACTORS AND AVAILABLE VAC-TRUCKS, TANK PUMPHS AND OTHERLY ACCESSIBLE FOR CLEANUP OPERATIONS. IN ADDITION A CONTINUALLY UPDATED LIST OF AVAILABLE ABSORBENT MATERIALS AND CLEANUP SUPPLIES SHOULD BE KEPT ON SITE.
2. ALL MAINTENANCE PERSONNEL WILL BE MADE AWARE OF TECHNIQUES FOR PREVENTION OF SPILLS. THEY WILL BE INFORMED OF THE REQUIREMENTS AND PROCEDURES OUTLINED IN THIS PLAN. THEY WILL BE KEPT ABREAST OF CURRENT DEVELOPMENTS OR NEW INFORMATION ON THE PREVENTION OF SPILLS AND/OR NECESSARY ALTERATIONS TO THIS PLAN.
3. WHEN SPILLS OCCUR WHICH COULD ENDANGER HUMAN LIFE AND THIS BECOMES PRIMARY CONCERN, THE DISCHARGE OF THE LIFE SAVING PROTECTION FUNCTION WILL BE CARRIED OUT BY THE LOCAL POLICE AND FIRE DEPARTMENTS.
4. ABSORBENT MATERIALS, WHICH ARE USED IN CLEANING UP SPILLED MATERIALS, WILL BE DISPOSED OF IN A MANNER SUBJECT TO THE APPROVAL OF THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT.
5. FLUSHING OF SPILLED MATERIAL WITH WATER WILL NOT BE PERMITTED UNLESS SO AUTHORIZED BY THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT.

B14 MONITORING AND MAINTENANCE GUIDELINES FOR POLLUTION PREVENTION MEASURES:

- SILT FENCE MAINTENANCE REQUIREMENTS**
1. INSPECT THE SILT FENCE PERIODICALLY AND AFTER EACH STORM EVENT.
 2. IF FENCE FABRIC TEARS, STARTS TO DECOMPOSE OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED PORTION IMMEDIATELY.
 3. REMOVE DEPOSITED SEDIMENT WHEN IT REACHES HALF THE HEIGHT OF THE FENCE AT ITS LOWEST POINT OR IS CAUSING THE FABRIC TO BULGE.
 4. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.
 5. AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE THE FENCE AND SEDIMENT DEPOSITS, BRING THE DISTURBED AREA TO GRADE AND STABILIZE IT.

TEMPORARY GRAVEL CONSTRUCTION MAINTENANCE REQUIREMENTS

1. INSPECT ENTRANCE PAD AND SEDIMENT DISPOSAL AREA WEEKLY AND AFTER STORM EVENTS OR HEAVY USE.
2. RESHAPE AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
3. TOPDRESS WITH CLEAN, GRASS, ANTI-FREEZE, METALS, RUBBER FRAGMENTS, ROAD GRIT, SALTS AND SANDS, CONSTRUCTION TRASH AND DEBRIS, FERTILIZERS, CLEANING AGENTS, CHEMICALS, PAINT, ANIMAL WASTE, ELEVATED STORM RUNOFF TEMPERATURES, PESTICIDES AND PATHOGENS.
4. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO STREETS BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED IF THE WATER IS CONVEYED INTO A SEDIMENT TRAP OR BASIN.
5. REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY.

TEMPORARY BEEHIVE INLET SEDIMENT TRAP MAINTENANCE REQUIREMENTS

1. INSPECT TEMPORARY SEDIMENT TRAPS AFTER EACH STORM EVENT AND IMMEDIATELY REPAIR ANY EROSION AND PIPING HOLES.
2. REMOVE SEDIMENT WHEN IT HAS ACCUMULATED TO WITHIN 6" OF CASTING
3. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, REMOVE THE STRUCTURE AND SEDIMENT, SMOOTH THE SITE TO BLEND WITH ADJOINING AREAS AND STABILIZE IT.

CURB INLET PROTECTION MAINTENANCE REQUIREMENTS

1. AFTER EACH STORM EVENT REMOVE THE SEDIMENT AND REPLACE THE GRAVEL, REPLACE THE GEOTEXTILE FABRIC IF USED.
2. PERIODICALLY REMOVE SEDIMENT AND TRACKED-ON SOIL FROM THE STREET, WITHOUT FLUSHING, TO REDUCE THE THE SEDIMENT LOAD ON THE INLET PROTECTION.
3. INSPECT CASTING COVER PERIODICALLY FOR DAMAGE AND REPAIR, KEEP GRATES FREE OF DEBRIS.
4. AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE THE SEDIMENT DEPOSITS AND DISPOSE OF THEM PROPERLY.

EROSION CONTROL BLANKET MAINTENANCE REQUIREMENTS

1. DURING VEGETATIVE ESTABLISHMENT, INSPECT AFTER EACH STORM EVENT FOR ANY EROSION BELOW THE BLANKET.
2. IF ANY AREA[S] SHOW EROSION, PULL BACK THAT PORTION OF THE BLANKET COVERING IT, RE-SEED THE AREA AND RELAY AND STAPLE THE BLANKET.
3. AFTER VEGETATIVE ESTABLISHMENT CHECK THE TREATED AREA PERIODICALLY.

EROSION & SEDIMENT CONTROL SPECIFICATIONS FOR INDIVIDUAL BUILDING LOTS - SEE SHEET C103 FOR DETAILS AND SPECIFICATIONS

B15

SECTION C - STORMWATER POLLUTION PREVENTION PLAN - POST-CONSTRUCTION PHASE

C1 DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH THE PROPOSED LAND USE: SILT AND SEDIMENT FROM EXPOSED SOILS, LEAVES, MULCH, VEHICULAR SOURCES SUCH AS LEAKING FUEL OR OIL, BRAKE FLUID, BRAKE DUST, GREASE, ANTIFREEZE, METALS, RUBBER FRAGMENTS, ROAD GRIT, SALTS AND SANDS, CONSTRUCTION TRASH AND DEBRIS, FERTILIZERS, CLEANING AGENTS, CHEMICALS, PAINT, ANIMAL WASTE, ELEVATED STORM RUNOFF TEMPERATURES, PESTICIDES AND PATHOGENS.

C2

- SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION:
1. INSPECT AND MAINTAIN ALL MAINTENANCE MEASURES AS DETAILED IN THE STORMWATER POLLUTION PREVENTION MEASURES MAINTENANCE REQUIREMENTS BEGINNING IMMEDIATELY AFTER INSTALLATION AND CONTINUING UNTIL VEGETATION HAS BEEN SUFFICIENTLY ESTABLISHED AND ALL CONSTRUCTION ACTIVITY IS COMPLETE.
 2. REMOVE ALL SILT FENCES, ETC., ONLY AFTER SEEDING AND SUFFICIENT VEGETATIVE GROWTH HAS BEEN ESTABLISHED IN EACH AREA TO A POINT WHERE SEDIMENT/POLLUTANTS WILL NOT ENTER THE CREEK.
 3. INSPECTION AND MAINTENANCE OF ALL AREAS IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ACCEPTED BY THE BOONE COUNTY SURVEYORS OFFICE. INSPECTION AND MAINTENANCE OF BMP'S SHALL FOLLOW TIME TABLES SET FORTH IN THE MAINTENANCE AND OPERATIONS MANUAL.

C3

- DESCRIPTION OF PROPOSED POST CONSTRUCTION STORMWATER QUALITY MEASURES -
1. TEMPORARY AND PERMANENT SEEDING.
 2. ON GOING MAINTENANCE BY THE OWNER TO INSURE THAT SEDIMENT, TRASH AND POLLUTANTS DO NOT LEAVE THE SITE.
 3. SEE BMP OPERATIONS AND MAINTENANCE MANUAL (O&M MANUAL) FOR DETAILS RELATED TO POST CONSTRUCTION STORMWATER QUALITY MEASURES
 4. LOCATION, DIMENSIONS, SPECIFICATIONS, AND CONSTRUCTION DETAILS OF EACH STORMWATER QUALITY MEASURE - SEE STORMWATER POLLUTION PREVENTION PLAN SHEETS C501-C502 FOR LOCATIONS AND SHEET C503-C504 FOR DETAILS AND SPECIFICATIONS.
 5. DESCRIPTION OF MAINTENANCE GUIDELINES FOR POST CONSTRUCTION STORMWATER QUALITY MEASURE - SEE OPERATIONS AND MAINTENANCE MANUAL.

CONSTRUCTION AND POST CONSTRUCTION

THE PURPOSE OF TRACKING DURING THE VARIOUS PHASES OF THE PROJECT IS TO LIMIT THE AMOUNT OF GROUND DISTURBED AT ANY GIVEN TIME AND TO PREVENT SEDIMENT FROM LEAVING THE SITE. FOR THIS REASON THE FOLLOWING SEQUENCING SHOULD BE FOLLOWED AS MUCH AS POSSIBLE.

CALL INDIANA UNDERGROUND PLANT PROTECTION SERVICE ("HOLEY MOLEY") AT 800-382-5544 TO CHECK THE LOCATION OF ANY UTILITIES TWO DAYS BEFORE WORK IS TO COMMENCE.

ESTABLISH ON-SITE LOCATION FOR OWNER/OPERATOR/CONTRACTOR PLACEMENT OF APPROVED PLANS AND RULE 5 NOI INSPECTION DOCUMENTATION.

BOONE COUNTY SURVEYORS OFFICE (317) 483-4444 MUST BE NOTIFIED AT LEAST 48 HOURS BEFORE CONSTRUCTION IS SCHEDULED TO BEGIN. THE CONTRACTOR SHALL CONTACT THE BOONE COUNTY SURVEYORS OFFICE TO SET UP A PRE-CONSTRUCTION MEETING PRIOR TO STARTING CONSTRUCTION.

1. INSTALL A TEMPORARY STONE ACCESS DRIVE OFF ROAD (SEE EROSION CONTROL PLAN, SHEET C501-C502).
2. CONSTRUCT RAIL INFORMATION POSTING, INSTALL TRASH DUMPSTER, AND PLACE PORT-O-LET.
3. INSTALL CONSTRUCTION AND SILT FENCING AS SHOWN ON THE PLANS.
4. PLACE TEMPORARY SEED IN ALL AREAS WHERE WORK WILL DISCONTINUE FOR 14 DAYS OR MORE.
5. IF SEEDED AREAS DO NOT PRODUCE A MINIMUM OF 70 PERCENT VEGETATIVE COVER CONTRACTOR SHALL RE-SEED TO OBTAIN ADEQUATE VEGETATIVE COVER.

ADDITIONAL STORMWATER POLLUTION PREVENTION MEASURES

VEHICLE AND EQUIPMENT MAINTENANCE

DESCRIPTION AND PURPOSE

PREVENT OR REDUCE THE CONTAMINATION OF STORMWATER RESULTING FROM VEHICLE AND EQUIPMENT MAINTENANCE BY RUNNING A "DRY AND CLEAN SITE", THE BEST OPTION WOULD BE TO PERFORM MAINTENANCE ACTIVITIES AT AN OFFSITE FACILITY. IF THIS OPTION IS NOT AVAILABLE THEN WORK SHOULD BE PERFORMED IN DESIGNATED AREAS ONLY, WHILE PROVIDING COVER FOR MATERIALS STORED OUTSIDE, CHECKING FOR LEAKS AND SPILLS, AND CONTAINING AND CLEANING UP SPILLS IMMEDIATELY.

SUITABLE APPLICATIONS

THESE PROCEDURES ARE SUITABLE ON ALL CONSTRUCTION PROJECTS WHERE ON SITE YARD AREA IS NECESSARY FOR STORAGE AND MAINTENANCE OF HEAVY EQUIPMENT AND VEHICLES.

LIMITATIONS

ONSITE VEHICLE AND EQUIPMENT MAINTENANCE SHOULD ONLY BE USED WHERE IT IS IMPRACTICAL TO SEND VEHICLES AND EQUIPMENT OFFSITE FOR MAINTENANCE AND REPAIR. SENDING VEHICLES/EQUIPMENT OFFSITE SHOULD BE DONE IN CONJUNCTION WITH A STABILIZED CONSTRUCTION ENTRANCE/EXIT. OUTDOOR VEHICLE OR EQUIPMENT MAINTENANCE IS A POTENTIALLY SIGNIFICANT SOURCE OF STORMWATER POLLUTION. ACTIVITIES THAT CAN CONTAMINATE STORMWATER INCLUDE ENGINE REPAIR AND SERVICE, CHANGING OR REPLACEMENT OF FLUIDS, AND OUTDOOR EQUIPMENT STORAGE AND PARKING (ENGINE FLUID LEAKS).

IMPLEMENTATION

IF MAINTENANCE MUST OCCUR ONSITE, USE DESIGNATED AREAS, LOCATED AWAY FROM DRAINAGE COURSES. DEDICATED MAINTENANCE AREAS SHOULD BE PROTECTED FROM STORMWATER RUNOFF AND RUNOFF, AND SHOULD BE LOCATED AT LEAST 50 FT FROM DOWNSTEAM DRAINAGE FACILITIES AND WATERCOURSES.

DRIP PANS OR ABSORBENT PADS SHOULD BE USED DURING VEHICLE AND EQUIPMENT MAINTENANCE WORK THAT INVOLVES FLUIDS, UNLESS THE MAINTENANCE WORK IS PERFORMED ON AN IMPERMEABLE SURFACE IN A DEDICATED MAINTENANCE AREA.

PLACE A STOCKPILE OF SPILL CLEANUP MATERIALS WHERE IT WILL BE READILY ACCESSIBLE.

ALL FUELING TRUCKS AND FUELING AREAS ARE REQUIRED TO HAVE SPILL KITS AND/OR USE OTHER SPILL PROTECTION DEVICES.

USE ABSORBENT MATERIALS ON SMALL SPILLS. REMOVE THE ABSORBENT MATERIALS PROMPTLY AND DISPOSE OF PROPERLY.

INSPECT ONSITE VEHICLES AND EQUIPMENT DAILY AT STARTUP FOR LEAKS, AND REPAIR IMMEDIATELY.

KEEP VEHICLES AND EQUIPMENT CLEAN; DO NOT ALLOW EXCESSIVE BUILD-UP OF OIL AND GREASE.

SEGREGATE AND RECYCLE WASTES, SUCH AS GREASES, USED OIL OR OIL FILTERS, ANTIFREEZE, CLEANING SOLUTIONS, AUTOMOTIVE BATTERIES, HYDRAULIC AND TRANSMISSION FLUIDS, PROVIDE SECONDARY CONTAINMENT AND COVERS FOR THESE MATERIALS IF STORED ONSITE.

TRAIN EMPLOYEES AND SUBCONTRACTORS IN OIL SPILL AND SPILL CLEANUP PROCEDURES.

DRIP PANS OR PLASTIC SHEETING SHOULD BE PLACED UNDER ALL VEHICLES AND EQUIPMENT PLACED ON DOCKS, BARGES, OR OTHER STRUCTURES OVER WATER BODIES WHEN THE VEHICLE OR EQUIPMENT IS PLANNED TO BE IDLE FOR MORE THAN 1 HOUR.

PROPERLY DISPOSE OF USED OILS, FLUIDS, LUBRICANTS, AND SPILL CLEANUP MATERIALS.

DO NOT PLACE USED OIL IN A DUMPSTER OR POUR INTO A STORM DRAIN OR WATERCOURSE.

PROPERLY DISPOSE OF OR RECYCLE USED BATTERIES.

DO NOT BURY USED TIRES.

REPAIR LEAKS OF FLUIDS AND OIL IMMEDIATELY.

LISTED BELOW IS FURTHER INFORMATION IF YOU MUST PERFORM VEHICLE OR EQUIPMENT MAINTENANCE ONSITE.

INSPECTION AND MAINTENANCE

INSPECT AND VERIFY THAT BMP'S ARE IN PLACE PRIOR TO THE COMMENCEMENT OF ASSOCIATED ACTIVITIES. WHILE ACTIVITIES ASSOCIATED WITH THE BMP ARE UNDER WAY, INSPECT WEEKLY TO VERIFY CONTINUED BMP IMPLEMENTATION.

KEEP AMPLIE SUPPLIES OF SPILL CLEANUP MATERIALS ONSITE.

MAINTAIN WASTE FLUID CONTAINERS IN LEAK PROOF CONDITION.

VEHICLES AND EQUIPMENT SHOULD BE INSPECTED ON EACH DAY OF USE. LEAKS SHOULD BE REPAIRED IMMEDIATELY OR THE PROBLEM VEHICLE(S) OR EQUIPMENT SHOULD BE REMOVED FROM THE PROJECT SITE.

INSPECT EQUIPMENT FOR DAMAGED HOSES AND LEAKY GASKETS ROUTINELY. REPAIR OR REPLACE AS NEEDED.

VEHICLE AND EQUIPMENT FUELING

DESCRIPTION AND PURPOSE

VEHICLE EQUIPMENT FUELING PROCEDURES AND PRACTICES ARE DESIGNED TO PREVENT FUEL SPILLS AND LEAKS, AND REDUCE OR ELIMINATE CONTAMINATION OF STORMWATER RESULTING FROM FUELING. THIS CAN BE ACCOMPLISHED BY USING OFFSITE FACILITIES, FUELING IN DESIGNATED AREAS ONLY, ENCLOSING OR COVERING STORED FUEL, IMPLEMENTING SPILL CONTROLS, AND TRAINING EMPLOYEES AND SUBCONTRACTORS IN PROPER FUELING PROCEDURES.

LIMITATIONS

ONSITE VEHICLE AND EQUIPMENT FUELING SHOULD ONLY BE USED WHERE IT IS IMPRACTICAL TO SEND VEHICLES AND EQUIPMENT OFFSITE FOR FUELING. SENDING VEHICLES AND EQUIPMENT OFFSITE SHOULD BE DONE IN CONJUNCTION WITH A STABILIZED CONSTRUCTION ENTRANCE/EXIT.

IMPLEMENTATION

USE OFFSITE FUELING STATIONS AS MUCH AS POSSIBLE. THESE BUSINESSES ARE BETTER EQUIPPED TO HANDLE FUEL AND SPILLS PROPERLY. PERFORMING THIS WORK OFFSITE CAN ALSO BE ECONOMICALLY BY ELIMINATING THE NEED FOR A SEPARATE FUELING AREA AT A SITE.

DISCOURAGE "TOPPING-OFF" OF FUEL TANKS.

ABSORBENT SPILL CLEANUP MATERIALS AND SPILL KITS SHOULD BE AVAILABLE IN FUELING AREAS AND ON FUELING TRUCKS, AND SHOULD BE DISPOSED OF PROPERLY AFTER USE.

DRIP PANS OR ABSORBENT POOLS SHOULD BE USED DURING VEHICLE AND EQUIPMENT FUELING, UNLESS THE FUELING IS PERFORMED OVER AN IMPERMEABLE SURFACE IN A DEDICATED FUELING AREA.

USE ABSORBENT MATERIALS ON SMALL SPILLS. DO NOT HOSE DOWN OR BURY THE SPILL. REMOVE THE ABSORBENT MATERIALS PROMPTLY AND DISPOSE OF PROPERLY.

AVOID MOBILE FUELING OF MOBILE CONSTRUCTION EQUIPMENT AROUND THE SITE: RATHER, TRANSPORT THE EQUIPMENT TO DESIGNATED FUELING AREAS, TRAIN EMPLOYEES AND SUBCONTRACTORS IN PROPER FUELING AND CLEANUP PROCEDURES.

DEDICATED FUELING AREAS SHOULD BE PROTECTED FROM STORMWATER RUNOFF AND RUNOFF, AND SHOULD BE LOCATED AT LEAST 50 FT. AWAY FROM DOWNSTEAM DRAINAGE FACILITIES AND WATERCOURSES. FUELING MUST BE PERFORMED ON LEVEL-GRADE AREAS.

PROTECT FUELING AREAS WITH BERMS AND DIKES TO PREVENT RUNOFF, RUNOFF, AND TO CONTAIN SPILLS.

NOZZLES USED IN VEHICLE AND EQUIPMENT FUELING SHOULD BE EQUIPPED WITH AN AUTOMATIC SHUTOFF TO CONTROL DRIPS. FUELING OPERATIONS SHOULD NOT BE LEFT UNATTENDED.

FEDERAL, STATE, AND LOCAL REQUIREMENTS SHOULD BE OBSERVED FOR ANY STATIONARY ABOVE GROUND STORAGE TANKS.

INSPECTION AND MAINTENANCE

VEHICLES AND EQUIPMENT SHOULD BE INSPECTED EACH DAY OF USE FOR LEAKS. LEAKS SHOULD BE REPAIRED IMMEDIATELY OR PROBLEM VEHICLES OR EQUIPMENT SHOULD BE REMOVED FROM THE PROJECT SITE.

KEEP AMPLIE SUPPLIES OF SPILL CLEANUP MATERIALS ONSITE.

IMMEDIATELY CLEAN UP SPILLS AND PROPERLY DISPOSE OF CONTAMINATED SOIL AND CLEANUP MATERIALS.

SOLID WASTE MANAGEMENT

DESCRIPTION AND PURPOSE

SOLID WASTE MANAGEMENT PROCEDURES AND PRACTICES ARE DESIGNED TO PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORMWATER FROM SOLID OR CONSTRUCTION WASTE BY PROVIDING DESIGNATED WASTE COLLECTION AREAS AND CONTAINERS, ARRANGING FOR REGULAR DISPOSAL, AND TRAINING EMPLOYEES AND SUBCONTRACTORS.

SUITABLE APPLICATIONS

- THIS BMP IS SUITABLE FOR CONSTRUCTION SITES WHERE THE FOLLOWING WASTES ARE GENERATED OR STORED:
- SOLID WASTE GENERATED FROM TREES AND SHRUBS REMOVED DURING LAND CLEARING, DEMOLITION OF EXISTING STRUCTURES (RUBBLE), AND BUILDING CONSTRUCTION.
 - PACKING MATERIALS INCLUDING WOOD, PAPER, AND PLASTIC.
 - SCRAP OR SURPLUS BUILDING MATERIALS INCLUDING SCRAP METALS, RUBBER, PLASTIC, GLASS PIECES AND MASONRY PRODUCTS.
 - DOMESTIC WASTES INCLUDING FOOD CONTAINERS SUCH AS BEVERAGE CANS, COFFEE CUPS, PAPER BAGS, PLASTIC WRAPPERS, AND CIGARETTES.
 - CONSTRUCTION WASTES INCLUDING BRICK, MORTAR, TIMBER, STEEL AND METAL SCRAP, PIPE AND ELECTRICAL CUTTINGS, NON-HAZARDOUS EQUIPMENT PARTS, STYROFOAM AND OTHER MATERIALS SEND TRANSPORT AND PACKAGE CONSTRUCTION MATERIALS.

IMPLEMENTATION

- THE FOLLOWING STEPS WILL HELP KEEP A CLEAN SITE AND REDUCE STORMWATER POLLUTION:
- SELECT DESIGNATED WASTE COLLECTION AREAS ONSITE.
 - INFORM TRASH-HAULING CONTRACTORS THAT YOU WILL ACCEPT ONLY WATERTIGHT DUMPSTERS FOR ONSITE USE.
 - INSPECT DUMPSTERS FOR LEAKS AND REPAIR ANY DUMPSTER THAT IS NOT WATERTIGHT.
 - PROVIDE AN ADEQUATE NUMBER OF CONTAINERS WITH LIDS OR COVERS THAT CAN BE PLACED OVER THE CONTAINER TO KEEP RAIN OUT OR TO PREVENT LOSS OF WASTES WHEN IT IS WINDY.
 - PLAN FOR ADDITIONAL CONTAINERS AND MORE FREQUENT PICKUP DURING THE DEMOLITION PHASE OF CONSTRUCTION.
 - COLLECT SITE TRASH DAILY, ESPECIALLY DURING RAINY AND WINDY CONDITIONS.
 - REMOVE THE SOLID WASTE PROMPTLY SINCE EROSION AND SEDIMENT CONTROL DEVICES TEND TO COLLECT LITTER.
 - MAKE SURE THAT TOXIC LIQUID WASTES (USED OILS, SOLVENTS, AND PAINTS) AND CHEMICALS (ACIDS, PESTICIDES, ADDITIVES, CURING COMPOUNDS) ARE NOT DISPOSED OF IN DUMPSTERS DESIGNATED FOR CONSTRUCTION DEBRIS.
 - DO NOT HOSE OUT DUMPSTERS ON THE CONSTRUCTION SITE. LEAVE DUMPSTER CLEANING TO THE TRASH HAULING CONTRACTOR.
 - ARRANGE FOR REGULAR WASTE COLLECTION BEFORE CONTAINERS OVERFLOW.
 - CLEAN UP IMMEDIATELY IF A CONTAINER DOES SPILL.
 - MAKE SURE THAT CONSTRUCTION WASTE IS COLLECTED, REMOVED, AND DISPOSED OF ONLY AT AUTHORIZED DISPOSAL AREAS.
 - INSPECT THE STORM MANHOLE WITH SHOUT. REMOVE ANY FLOATING DEBRIS ON A REGULAR BASIS AND HAVE SUMPS PROFESSIONALLY CLEANED ONCE A YEAR. **CAUTION SHOULD BE NOTED- ALL SUMPS ARE DEEP AND POTENTIALLY DANGEROUS. EXTREME CARE AND SAFETY MEASURES ALONG WITH OSHA GUIDELINES SHOULD BE FOLLOWED.

COLLECTION, STORAGE, AND DISPOSAL

LITTERING ON THE PROJECT SITE SHOULD BE PROHIBITED.

TO PREVENT CLOGGING OF THE STORM DRAINAGE SYSTEM, LITTER AND DEBRIS REMOVAL FROM DRAINAGE GRATES, TRASH ROCKS, AND DITCH LINES SHOULD BE A PRIORITY.

TRASH RECEPTACLES SHOULD BE PROVIDED IN THE CONTRACTOR'S YARD, FIELD TRAILER AREAS, AND AT LOCATIONS WHERE WORKERS CONGREGATE FOR LUNCH AND BREAK PERIODS.

LITTER FROM WORK AREAS WITHIN THE CONSTRUCTION LIMITS OF THE PROJECT SITE SHOULD BE COLLECTED AND PLACED IN WATERTIGHT DUMPSTERS AT LEAST WEEKLY, REGARDLESS OF WHETHER THE LITTER WAS GENERATED BY THE CONTRACTOR, THE PUBLIC, OR OTHERS. COLLECTED LITTER AND DEBRIS SHOULD NOT BE PLACED IN OR NEXT TO DRAIN INLETS, STORMWATER DRAINAGE SYSTEMS, OR WATERCOURSES.

DUMPSTERS OF SUFFICIENT SIZE AND NUMBER SHOULD BE PROVIDED TO CONTAIN THE SOLID WASTE GENERATED BY THE PROJECT. FULL DUMPSTERS SHOULD BE REMOVED FROM THE PROJECT SITE AND THE CONTENTS SHOULD BE DISPOSED OF BY THE TRASH HAULING CONTRACTOR.

CONSTRUCTION DEBRIS AND WASTE SHOULD BE REMOVED FROM THE SITE BIWEEKLY OR MORE FREQUENTLY AS NEEDED.

CONSTRUCTION MATERIAL VISIBLE TO THE PUBLIC SHOULD BE STORED OR STOCKED IN AN ORDERLY MANNER.

STORMWATER RUNOFF SHOULD BE PREVENTED FROM CONTACTING STORED SOLID WASTE THROUGH THE USE OF BERMS, DIKES, OR OTHER TEMPORARY DIVERSION STRUCTURES OR THROUGH THE USE OF MEASURES TO ELEVATE WASTE FROM SITE SURFACES.

SOLID WASTE STORAGE AREAS SHOULD BE LOCATED AT LEAST 50 FT. FROM DRAINAGE FACILITIES AND WATER COURSES AND SHOULD NOT BE LOCATED IN AREAS PRONE TO FLOODING OR PONDING.

INSPECTION AND MAINTENANCE

INSPECT AND VERIFY THAT A ACTIVITY-BASED BMP'S ARE IN PLACE PRIOR TO THE COMMENCEMENT OF ASSOCIATED ACTIVITIES. WHILE ACTIVITIES ASSOCIATED WITH THE BMP ARE UNDER WAY, INSPECT WEEKLY TO VERIFY CONTINUED BMP IMPLEMENTATION.

INSPECT BMP'S SUBJECT TO NON-STORMWATER DISCHARGE DAILY WHILE NON-STORMWATER DISCHARGES OCCUR.

INSPECT CONSTRUCTION WASTE AREA REGULARLY.

ARRANGE FOR REGULAR WASTE COLLECTION.

EVALUATION FOR CONSTRUCTION PROJECTS