**INSTRUCTIONS FOR PREPARING A**

**STORMWATER POLLUTION PREVENTION PLAN (SWPPP)**

This document presents a template for assembling a Stormwater Pollution Prevention Plan (SWPPP) for public improvement projects administered by the City of Overland Park’s Public Works Department. The City does not require that this exact format be used, but a SWPPP must be present on all jobs that hold a City Land Disturbance Permit and a Kansas Department of Health and Environment (KDHE) Construction Site Erosion Control permit.

The SWPPP is to be assembled in a 3-ring binder, with four (4) tab dividers for the following sections:

 Section 1: Project Narrative

 Section 2: Regulatory Permits

 Section 3: Drawings

 Section 4: Construction Phase Forms

The template includes a SWPPP cover sheet, table of contents, and section cover sheets with applicable content. General descriptions and instructions are included on the cover sheet of each section to clarify the purpose and intent.

Sections 1, 2, and 3 are the components of the SWPPP that will be assembled by the City (or City’s Consultant). The SWPPP will be assembled for the project and provided to the Contractor at the pre-construction meeting. A copy of the SWPPP will be provided to the Contractor’s Water Pollution Control Manager (WPCM). Presented on the following page is a checklist of the components the SWPPP document should include for pre-construction activities.

Section 4 includes forms related to the maintenance of the SWPPP which is the responsibility of the Contractor’s WPCM.

**Stormwater Pollution Prevention Plan (SWPPP)**

**Checklist for Pre-Construction Activities**

|  |  |
| --- | --- |
| □ | Prepare SWPPP before construction starts |
| Site Description to include: | |
|  | - Nature of activity in description |
|  | - Intended sequence of major activities |
|  | - Total disturbed acreage |
|  | - General location map |
|  | Site plan that shows drainage patterns, slopes, areas of disturbance, locations of major controls, structural practices shown, temporary stabilization practices, offsite materials, waste, borrow or equipment storage areas, surface waters, discharge points, final stabilization |
| □ | Description of all pollution control measures |
| □ | Description of implementation sequence |
| □ | Description of interim stabilization practices |
| □ | Description of permanent stabilization practices |
| □ | Description of a sequence to implement stabilization practices |
| □ | Describe structural practices that are diverting flow from exposed soils, retaining flows, or limiting runoff from exposed areas |
| □ | Describe measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur AFTER construction operations have been completed |
| □ | Describe measure that will prevent discharge of solid materials to waters of the U.S. except as authorized by a 404 permit |
| □ | Describe measures to minimize off-site vehicle tracking and generation of dust |
| □ | Documentation from requirements of the Endangered Species Act |

**STORMWATER POLLUTION**

**PREVENTION PLAN**

#### [PROJECT NAME]

#### [CITY PROJECT NUMBER]

**[Site Address]**

#### Overland Park, Kansas

#### [Zip Code]

**Prepared for:**

**City of Overland Park**

**8500 Santa Fe Drive**

**Overland Park, Kansas 66212**

**Prepared by:**

**[Preparer Name]**

**[Prepare Business]**

**[Preparer Address]**

**[Preparer City, State Zip Code]**

**[Preparer Phone No.]**

#### [Month, Year]

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2.3 Sediment Control Measures

2.4 Chemical and Waste Control Measures

# SECTION 2: REGULATORY PERMITS

Notice of Intent (NOI) Submitted to KDHE

KDHE Issued Permit Letter and Permit Number

KDHE General Permit for Construction

KDWP/KSHS Clearance Letters *[if applicable]*

Federal Permits *[if applicable]*

City of Overland Park Land Disturbance Permit

Adjacent Cities Land Disturbance Permits *[if applicable]*

###### SECTION 3: DRAWINGS

Vicinity Map

Erosion and Sediment Control Plans and Specifications

Site Plan

**SECTION 4: CONSTRUCTION PHASE FORMS**

Construction/Implementation Checklist

Environmental Inspector Certification

Water Pollution Control Manager Certification

Contractor’s Project Schedule

Potential Construction Site Stormwater Pollutants

Inspection Report Form

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Final Inspection Form

Notice of Termination (NOT)

*Optional:*

SWPPP Modification Report Form

Project Rainfall Log Form

Amendment Form

**SECTION 1**

*This section describes nature and sequence of construction activity, site features and sensitive areas to be protected, potential sources of pollution, and a general description and intent of erosion and sediment control BMPs to be implemented. Elements of this section are intended to be project specific and provide adequate information about the project.*

**SECTION 1: PROJECT NARRATIVE**

**1. Project and Site Description**

The City of Overland Park, Kansas is currently preparing construction plans for [insert project name]. The project involves the construction of [provide general description (i.e. road widening, storm drainage improvements, road or bridge construction, etc] for the purpose of [describe purpose and need of project]. Construction activities will commence [provide approximate start date] with an estimated completion date of [provide approximate end date]. Presented in Section 4 of this document is the Contractor’s project schedule.

The project site is located at [provide street address, nearest cross streets or general location] in the [provide legal site description: QTR, Section, Township and Range] in Johnson County, Overland Park, Kansas. The total area of the site is [XXX] acres.

Existing site conditions include [describe current land use]***.*** The site has soils, which are classified by the USDA Natural Resources Conservation Service as [enter soil classification]. These soils are described as [enter description]. Existing vegetation consists of [describe vegetation] located [where onsite].

Runoff from the project site is discharged into [describe whether city storm drain, stream, river, etc.; how many major points of discharge on site; and ultimate receiving water body of site]. [This paragraph should also include identification of unique site features that may present erosion and sediment control challenges/concerns including streams, stream buffers, wetlands, steep slopes, or highly erodible soils]

There are [X] major phases of the construction work: [Describe the intended construction sequencing and timing of major activities, including grading activities, road and utility installation, and building phases.]

The estimated total area to be disturbed is [XXX] acres. Soil disturbing activities will primarily include [describe general sequence of activities within each phase, i.e. site grading, installation of storm sewer pipes, inlets, construction of curb & gutters, utilities, retaining walls, etc.]. The primary potential sources of stormwater contamination for this project include soil disturbing activities and construction material spillage [edit this statement as needed to include additional pollutants].

**2. Best Management Practices**

The purpose of this section is to identify the types of erosion and sediment controls used during construction activities. The locations and details of these Best Management Practices (BMPs) are included in Section 3 (see Erosion and Sediment Control Plans). This section also addresses the control of other potential storm water pollutant sources.

**2.1 Coordination with Construction Activities.** The Contractor will be responsible for implementing and maintaining the Best Management Practices (BMPs) through the course of construction. All BMPs shall be sequenced according to activities in the field as follows:

*[Add, revise or delete the following bullets in blue font as needed to summarize general sequence of project]*

a) Through each phase of construction, natural areas and features will be protected from disturbance by placement of [insert method (i.e. signs, construction fence, etc).]

b) Clearing and grading will not occur in an area until it is necessary for construction to proceed (see Project Phasing).

c) Temporary perimeter sediment controls will be installed before any clearing and grading begins.

d) The stabilized construction site entrance will be constructed before clearing and grading begins.

e) Within 14 days of clearing and grading, areas not immediately affected by construction activities will be stabilized.

f) Soil stockpiles will be stabilized no later than 14 days from the last construction activity in that area.

g) Once earthwork activities ceases permanently in an area, that area will be immediately stabilized

h) [A sediment basin or sediment trap at (indicate location)] will be constructed before any construction begins. All cleared and graded soils will be sloped to the sedimentation basin].

i) [After the entire site is stabilized, the accumulated sediment will be removed from the basin. The sediment basin may be converted to a post construction BMP, as appropriate]

j) [Vegetated swales, bio-retention cells, and other post construction infiltration BMPs will not be constructed until the entire site is permanently stabilized.]

k) [Duration of time shall be minimized for work in or near water bodies and shall be stabilized immediately following completion of disturbance.]

**2.2 Erosion Control Measures.** The following BMPs will be used to stabilize onsite soils and prevent erosion during construction:

*[Add, revise or delete the following bullets in blue font as needed to summarize purpose of BMP selected]*

a) [Permanent seeding and sodding, temporary seeding, hydroseeding, hydrocover, mulch cover] of disturbed areas when construction activities have temporarily or permanently ceased.

b) Mulch Cover of disturbed areas when ground cover is required and temporary or permanent seeding is not feasible.

c) [Erosion Control blankets, turf reinforcement mats, tackifiers, etc.] to provide temporary or permanent cover and/or stability to disturbed slopes or channels subject to overland or concentrated surface flow.

d) Surface Roughening by means of grooving, tracking, disking or ripping of any rough graded slopes not yet ready for seeding or other treatment and which will not be disturbed for a period of 7 days.

e) Effective dust control measures such as adequate moisture content or approved dust suppressants shall be taken.

**2.3 Sediment Control Measures**. The following structural BMPs will be utilizedto detain, filter or cause settlement of sediment from runoff, as well as measures used to temporarily direct or divert runoff onsite or at the site perimeter.

*[Add, revise or delete the following bullets in blue font as needed to summarize purpose of BMP selected]*

a) [Silt fence, biodegradable logs, berms, dikes, etc.] will be used as temporary perimeter sediment controls to divert or detain flows from exposed soils and limit runoff and discharge of pollutants from exposed areas of the site.

b) [Temporary slope drains, diversions, etc] shall be used to convey concentrated water from the top of a slope to the toe and thereby preventing erosion over the slope face.

c) [Rock checks , ditch checks, etc.] will be used in ditches with large or concentrated flows.

d) [Filter socks, rock checks, temporary stabilization, etc] will be placed to protect all storm sewer inlets and outlets on or near the site by filtering or temporarily impeding the flow sufficiently to reduce the quantity of sediment carried.

e) Accumulated sediment behind barriers, traps, etc., shall be removed when it exceeds the volumes specified for any particular measure.

f) A temporary crossing shall be constructed to allow construction access and crossing of [name of creek].

**2.4 Chemical and Waste Control Measures.** Presented in Section 4 of this document is a table summarizing the materials or substances with known hazardous properties that are expected to be present on site during construction.

Management of materials and practices, outside of soil disturbing activities, shall be the responsibility of the Contractor. Such activities shall include, but not be limited to, the items shown below:

a) Waste Disposal- All waste materials will be collected and stored in securely lidded metal dumpsters. The dumpster will meet all local and state solid waste management regulations. All waste and construction debris from the site will be deposited in the dumpsters. The dumpster will be emptied on a periodical basis. No construction waste materials will be buried onsite.

b) Sanitary Waste - All sanitary waste will be collected from the portable units on a frequent, periodical basis by a licensed sanitary waste management contractor.

c) Concrete Waste from Concrete Trucks - Excess concrete and concrete wash water shall be returned to the concrete plant or deposited at a designated containment area on site, constructed in a manner to prevent run-off from entering the street, storm water drainage systems or waterways. Wash water may not be deposited in streets, curbs, gutters, storm drains, or waterways.

d) Hazardous Substances and Hazardous Waste - All hazardous waste materials will be disposed of in the manner specified by local or state regulation or by the manufacturer.

**SECTION 2**

*Include the following permits in this section:*

*a) Notice of Intent (NOI) Submitted to KDHE (including attachments and figures, etc.)*

*b) Copy of KDHE Issued Permit Letter and Permit Number*

*c) Copy of KDHE General Permit for Construction*

*d) Copy of KDWP/KSHS Clearance Letters (if applicable)*

*e) Copy of Federal Permits (relevant federal permits including, but not limited to, Corp of Engineers 404 Dredge and Fill Permits)*

*f) Copy of City of Overland Park Land Disturbance Permit*

*g) Copy of adjacent cities Land Disturbance Permits (if applicable)*

**SECTION 3**

*Attach following drawings to this section:*

*a) Vicinity Map - an area map showing the outline of the construction site and the general topographic features of the area at least one mile beyond the project site boundary*

*b) Erosion and Sediment Control Plan Sheets, Detail Sheets and Drainage Area Map*

*c) Erosion and Sediment Control Specifications included in the contract documents.*

*d) Site Plan - A copy of the ESC Plan Sheets may be used as the starting point for the site plan. This plan is a working document that summarizes the implementation of BMPs throughout project construction, including:*

 *Erosion control measures (seeding, sodding, stockpile locations & protection, etc.)*

 *Sediment control measures (inlet protection, perimeter protection, sediment basins, construction entrances ,temporary crossings, etc)*

 *Location of chemical and waste controls (i.e. waste disposal, sanitary waste, concrete washouts and hazardous materials).*

**SECTION 4**

*Insert the following forms in this section:*

 *Stormwater Pollution Prevention Plan (SWPPP) Construction/Implementation Checklist*

 *Water Pollution Control Manager (WPCM) Certification - Certificate of completion of Kansas Department of Transportation (KDOT) Environmental Inspector Training and Environmental Manager Training. Training to have been completed within 36 months of beginning construction project. This certificate must be included in, or kept with, the Stormwater Pollution Prevention Plan for the project.*

* *Environmental Inspector Certification - Certificate of completion of Kansas Department of Transportation (KDOT) Environmental Inspector Training to have been completed within 36 months of beginning construction project. This certificate must be included in, or kept with, the Stormwater Pollution Prevention Plan for the project.*

 *Contractor’s Approved Project Schedule*

 *Potential Construction Site Stormwater Pollutants*

 *Stormwater Construction Site Inspections form – The Contractor’s Environmental Inspector is responsible for conductin*g *inspections every 14 days and within 24 hours of a ½ inch rain event. The City’s Inspection Report will be used to document inspections and signed by the Environmental Inspector. Reports will be submitted within 24 hours to the WPCM and the Engineer. The WPCM) will review and sign the report within 3 days and acknowledge all deficiencies and corrective actions required within 7 days or prior to the next rain event.*

 *Final Inspection of Erosion and Sediment Control form – The final inspection will be completed by the WPCM once the site is permanently stabilized.*

 *Notice of Termination - Submission of the Notice of Termination (NOT) constitutes notice that the party relinquishes authorization for coverage under the Kansas Water Pollution Control general permit, or KDHE authorized successor permits, issued for discharge of Stormwater Runoff from Construction for the construction activity at the site named herein. Completion of the NOT does not automatically relieve the former permittee of any civil, criminal and/or administrative penalties. The form can be found at:* [*http://www.kdheks.gov/stormwater/download/Notice\_of\_Termination.pdf*](http://www.kdheks.gov/stormwater/download/Notice_of_Termination.pdf)

*Optional Forms:*

 *SWPPP Modification Report Form – the modification form may be used to document any changes to the SWPPP by the project team.*

 *Amendment Log/Modification Report Form – The amendment log and modification form may be used to record major and minor modifications/amendments.*

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| --- | --- |
| **Stormwater Pollution Prevention Plan (SWPPP)**  **Construction/Implementation Checklist** | |
| □ | Retain a copy of the SWPPP onsite |
| □ | Make SWPPP available upon request |
| □ | Signed certification forms in SWPPP |
| □ | Identify and record all potential sources of pollution to include: porta-pottys, fuel tanks, staging areas, waste containers, chemical storage areas, concrete cure, paints, solvents |
| □ | Describe what kind of construction or waste materials are expected to be stored on-site with updates recorded. Ex. Controls used to reduce pollutants from *these materials* |
| □ | Identify all operators for the project site and the areas of the site over which each operator has control. |
| Maintain Records of Construction Activities, including: | |
| □ | Dates when major grading activities occur |
| □ | Dates when construction activities temporarily or permanently cease on a portion of the site |
| □ | Dates of rainfall and the amount of rainfall |
| □ | Dates and descriptions of the character and amount of any spills of hazardous materials |
| □ | Records of reports filed with regulatory agencies if reportable quantities of hazardous materials spilled |
| Prepare Inspection Reports summarizing: | |
| □ | Name of inspector |
| □ | Measures/areas inspected |
| □ | Observed conditions |
| □ | Update or modify SWPPP to reflect changes at a site that effect discharge, or where inspections identify SWPPP/BMPs as ineffective |
| □ | Update SWPPP regarding modifications to BMPs within 7 days of such inspection |
| □ | Retain copies of inspection reports for 3 years from the date permit coverage is terminated |
| Report Releases of Reportable Quantities of Oil or Hazardous Materials within 24-hours of their occurrence: | |
| □ | Notify National Response Center (800) 424-8802 |
| □ | Notify the Kansas Division of Emergency Management: 24-hour Spill Response  (800) 275-0297 |
|  | Kansas Department of Health and Environment: 24-hour Spill Response  (785) 296-1679 |
| □ | Spills that pose immediate threat to public safety shall be reported immediately to:  ▪ Overland Park Fire Department at 911  ▪ Kansas Division of Emergency Management (800) 275-0297 or (785) 296-8013 |
| □ | Modify the pollution prevention plan to include date of release, circumstances leading to the release and steps taken to prevent reoccurrence of the release |
| Modify Pollution Prevention Plan as necessary to: | |
| □ | Comply with the minimum permit requirements when notified by **U.S. Environmental Protection Agency** or Kansas Dept. of Health and Environment that the plan does not comply |
| □ | Address a change in design, construction operation, or maintenance, which has an effect on the potential for discharge of pollutants |
| □ | Prevent reoccurrence of reportable quantity releases of a hazardous material or oil |

**Potential Construction Site Stormwater Pollutants**

***(Indicate pollutants as appropriate)***

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Trade Name Material** | **Chemical/Physical Description(1)** | **Storm Water Pollutants(1)** |
| □ | Pesticides (insecticides, fungicides, herbicides, rodenticides) | Various colored to colorless liquid, powder, pellets, or grains | Chlorinated hydrocarbons, organophosphates, carbamates, arsenic |
| □ | Fertilizer | Liquid or solid grains | Nitrogen, phosphorous |
| □ | Plaster | White granules or powder | Calcium sulphate, calcium carbonate, sulfuric acid |
| □ | Cleaning solvents | Colorless, blue, or yellow-green liquid | Perchloroethylene, methylene chloride, trichloroethylene, petroleum distillates |
| □ | Asphalt | Black solid | Oil, petroleum distillates |
| □ | Concrete | White solid | Limestone, sand |
| □ | Glue, adhesives | White or yellow liquid | Polymers, epoxies |
| □ | Paints | Various colored liquid | Metal oxides, Stoddard solvent, talc, calcium carbonate, arsenic |
| □ | Curing compounds | Creamy white liquid | Naphtha |
| □ | Wastewater from construction equipment washing | Water | Soil, oil & grease, solids |
| □ | Sanitary wastes/sewage | Water, fecal matter | Bacteria, ammonia, nutrients |
| □ | Wood preservatives | Clear amber or dark brown liquid | Stoddard solvent, petroleum distillates, arsenic, copper, chromium |
| □ | Hydraulic oil/fluids | Brown oily petroleum hydrocarbon | Mineral oil |
| □ | Gasoline | Colorless, pale brown or pink petroleum hydrocarbon | Benzene, ethyl benzene, toluene, xylene, MTBE |
| □ | Diesel fuel | Clear, blue-green to yellow liquid | Petroleum distillate, oil & grease, naphthalene, xylenes |
| □ | Kerosene | Pale yellow liquid petroleum hydrocarbon | Coal oil, petroleum distillates |
| □ | Antifreeze/coolant | Clear green/yellow liquid | Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc) |
| □ | Erosion | Solid Particles | Soil, sediment |

(1)Data obtained from MSDSs when available

**Common Compliance Problems During Inspections**

The following are problems commonly found at construction sites. As you conduct your inspections, keep these items in mind.

**1. Not providing temporary or permanent cover (i.e., soil stabilization)**

Stabilization of disturbed areas must be initiated as soon as practicable whenever any clearing, grading, excavating, or other soil disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Initial stabilization activities must be completed within 21 days.

**2. No sediment controls on-site**

Sediment controls must be in place before soil-disturbance activities begin. Don’t proceed with grading work out-of-phase. Stormwater runoff from disturbed areas which leaves the site must pass through an appropriate sediment control prior to leaving the construction site.

**3. No sediment control for temporary stockpiles**

Temporary stockpiles must be seeded, covered, or surrounded by properly installed silt fence or straw wattles. Stockpiles should never be placed on paved surfaces.

**4. No inlet protection**

All on-site storm drain inlets that could receive a discharge from the construction site must be protected before construction begins and must be maintained until the site is finally stabilized.

**5. No BMPs to minimize vehicle tracking onto the road**

Vehicle exits must use BMPs such as stone pads, concrete or steel wash racks, or equivalent systems to prevent vehicle tracking of sediment.

**6. Improper solid waste or hazardous waste management**

Solid waste (including trash and debris) must be disposed of properly, and hazardous materials (including oil, gasoline, and paint) must be properly stored (which includes secondary containment). Portable toilets should be at least ten feet behind curb, at least 20 feet from any storm drain, and should be anchored on all corners.

**7. Dewatering and other pollutant discharges at the construction site**

Dewatering discharge must be treated as necessary to remove suspended solids and turbidity to prevent any violation of water quality standards.

**8. Poorly managed washouts**

Water from washouts must not enter the storm drain system or nearby receiving water. Make sure washouts are clearly marked, sized adequately, and frequently maintained.

**9. Inadequate BMP maintenance**

BMPs must be frequently inspected and maintained. Maintenance should occur for BMPs that have reduced capacity to treat stormwater (refer to ESC site plans in SWPPP for proper BMP installation, operation and maintenance guidelines), or BMPs that have been damaged and need to be repaired or replaced.

**10. Inadequate documentation**

Failing to keep a SWPPP up-to-date, or keep it on-site, are permit violations. You should ensure that all inspection reports and updates to the SWPPP are documented and also kept on-site.

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| **AMENDMENT LOG** | | | |
| Project/LDP Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Contractor/Representative:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |
| Amend. No. | Date | Approved By | Describe Amendment in General (More details may be marked in the site plan or noted in the daily inspection report) |
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***Optonal Form for Amendment Log- Use for major modifications that need approval, use site plan or current amendment log for minor modifications.***

**SWPPP MODIFICATION REPORT FORM**

Date Submitted: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Project/LDP Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Contractor/Representative:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- | --- | --- | --- |
| **Submit To:** | S-1 CITY City Engineer | |  |
| **Address:** |  |  |  |
|  |  |  |  |
| **Telephone:** |  |  |  |
| **Facsimile:** |  |  |  |
| **Sent Via:** | **Facsimile** | **Courier** | **US Mail** |

Authorized Author: Title:

Company: Project Role:

Signature: Date:

Modifications Required to the STORMWATER POLLUTION PREVENTION PLAN:

Reasons for Modifications: