Revised Storm Water Management Plan

For Reporting Period 2008 - 2013

RECEIVED
OCT 14 2009
WATER PROTECTION PROGRAM

NPDES Phase II Stormwater Permit Application

City of Pleasant Valley

6500 Royal Street

Pleasant Valley, Missouri 64068

Located in the following sections:

Section 22, Township 5N, Range 32 W, and the;

Northwest quarter of Section 23, Township 51N, Range 32 W and the;

North half of Section 27, Township 51N, Range 32 W.

Approximately at:

39 degrees 13 minutes 00 seconds North Latitude, and;

94 degrees 29 minutes 00 seconds West Longitude

Submitted October 14, 2009

Information on the Permittee:

Name of the Permittee: City of Pleasant Valley, Missouri

Type of Entity: City - Municipality

Total Acres (acres): Approx. 1 sq. mile or 680 acres

Mailing Address: 6500 Royal St. Pleasant Valley, MO 64068

Primary Contact: Kevin Cronk, Assistant Public Works Director

Phone Number: (816) – 781 - 6282

Secondary Contact: Juretta Goode, Pleasant Valley City Clerk

Phone Number: (816) – 781 - 3996

Information on the Municipal Separate Storm Sewer System:

MS4 System Location: Pleasant Valley

Name of Organization: City of Pleasant Valley

County Permittee Resides: Clay County

The major receiving waters within the permitted area include:

Shoal Creek, Little Shoal Creek, and Unnamed tributaries

The receiving waters are on the latest CWA's list of impaired waters: no

Received certification that the SWMP complies with the requirements of Part 3.1: No records

Information on Adjacent Waterways:

The Permittee is with 100 feet of: streams and lakes

The Permittee is not with 100 feet of waters classified as major reservoirs.

None of the Permittee's area is defined as wetland.

The Permittee has received a CWA, Section 404 permit from the US Army Corps of Engineers:
The City has not received a CWA, Section 404 permit from the US Army Corps of Engineers

Stormwater from Pleasant Valley does not discharge to a sinkhole.

Information on Critical Areas: SEE ATTACHMENT

There are threatened or endangered species in the area: ___none_____

The Permittee has met eligibility criteria for protection of threatened or endangered species.

There are critical habitats in the area: _____none_____

The Permittee has met eligibility criteria for protection of critical habitats.

There are no historic properties in the area.

MCM#1: Public Education and Outreach:

4.2.1.1 Permittee Requirements

Pleasant Valley plans to continue its public education program by distributing educational materials to the community and conducting outreach activities. The focus of these efforts will be to educate the public with activities discussing the impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater run-off.

4.2.1.2 Decision Process

Pleasant Valley developed their stormwater public education and outreach program in cooperation with other jurisdictions in the region. The target pollutants, specific to Pleasant Valley, were identified and prioritized. The actions that impact the target pollutants were also identified. The public education program was designed to impact the actions identified.

The following is a prioritized list of the leading pollutants, experienced in the permitted area, that are carried by stormwater run-off into water bodies. (1=having most impact and 10=having the least impact)

____2____Suspended Solids

____3____Nutrients

____3____Pesticides

____1____Metals

____8____Bacteria

____8____Oxygen-Depleting Substances (BOD & other organics)

____4____Oil and Grease

____2____Salinity (Salt)

____8____Priority Toxic Organic chemicals (Household Hazardous Waste Pesticide/Herbicides)

____9____Habitat Alterations

____9____Floatables

____9____Temperature

4.2.1.2.1 Inform Public on Steps

Pleasant Valley plans to inform residents, business owners, and public elected officials in the community about the steps they can take to reduce stormwater pollution with the following programs:

Educational Materials:	Year 1	Year 2	Year 3	Year 4	Year 5
Post Information on Website	×	×	×	×	×
Maintain a Library of Stormwater Educational Materials	×	×	×	×	×
Distribute Brochures:			×	×	×
Lawn and Garden Activities					
Hazardous Waste Disposal					
Vehicle Maintenance and Washing					
Illicit Discharges					
Pet Waste					
Display Educational Materials at Public Events	×	×	×	×	×

Public Awareness:	Year 1	Year 2	Year 3	Year 4	Year 5
Publish Articles in Local Newspaper	×	×	×	×	×
Distribute Stormwater Info at Community Event	×	×	×	×	×
Host a Community Event	×	×	×	×	×
Post "No Dumping" Sign	×	×	×	×	×

4.2.1.2.2 How to Become Involved

Pleasant Valley plans to inform residents, business owners, and public elected officials on how to become involved in the stormwater program by providing those instructions in all materials distributed to the public. This is described in more detail in 4.2.2 Public Involvement/Participation.

4.2.1.2.3 Target Audiences

During the development of the education program, Pleasant Valley identified the sources of stormwater pollutants that needed to be reduced to improve overall water quality. The target audiences were selected because changing their behavior would have a significant stormwater quality impact on the target pollutants. The target audiences for the public education program are:

1. Citizens (Homeowners)
2. Business Owners
3. Developers and Home Builders
4. Car Wash Owners and Operators
5. Lawn Service Companies
6. Elected Officials
7. City Staff
8. Restaurant Owners and Operators

4.2.1.2.4 Target Pollutant Sources

The target pollutant sources having a major impact on stormwater quality were identified. The following is a list of these sources:

The following is a list of potential sources of pollutants that are experienced in the permitted area. (1=Major impact, 2=minor impact, 3=Not an impact)

___2___Construction activities (sediment, construction chemicals and debris, solid and sanitary wastes).

___2___Over-application of fertilizer, herbicides, pesticides

___2___Improper disposal of paint and household hazardous chemicals

___2___Pet waste contamination

___2____ Improper disposal of waster oil, grease, and gasoline disposal

___2____ Trash, debris, and illegal dumping

___3__Detergents washed into drains

___2___Snow removal (salt, sand and snow disposal)

___2__Sanitary sewer overflows

___2__Infiltration from cracked sanitary sewers

___2__Failing septic systems

___3__Sewer service connections to storm drainage system

___2__Foundation drains connected to storm drainage system

___2__Downspouts connected to storm drainage system

___3__Lake or water body used for motor boating

___2__Spills from roadway accidents or fires

___3__Connected impervious areas covering large acreages (such as malls, institutions with large parking areas)

___1__Stream bank erosion

___3__Waste transfer station

4.2.1.2.5 Outreach Strategy & Partnerships

Pleasant Valley's outreach strategy is to implement a variety of methods, to reach a number of different target audiences, multiple times. To change behavior, repetition is important. The mechanisms are described in 4.2.1.2.1 of the permit application.

The strategy is to partner with other governmental and non-governmental entities to execute the public outreach strategy. The idea is to share information and resources so duplication does not occur. The following entities will be assisting with the effort:

1. Other communities in the Region
2. County Extension
3. Local community groups
4. Regional Planning Organization (MARC)

4.2.1.2.6 Person Responsible

The person responsible for overall management and implementation of the permittee's stormwater public education and outreach program is the **DIRECTOR OF PUBLIC WORKS**. Others may be involved in the execution of each of the individual activities in the program.

4.2.1.2.7 Measurable Goals Selection

Pleasant Valley selected the measurable goals for each of the BMPs after reviewing EPA & ASCE research on the effectiveness of certain BMPs. The BMPs selected were chosen because of evidence that they will have a positive impact on the target pollutants identified as a concern for Pleasant Valley. The public education and outreach BMPs were also selected because many have been effective methods of communicating with the public for our community. The implementation of BMPs selected will determine the success of the measure on water quality.

MCM#2: Public Involvement and Participation

4.2.2.1 Permit Requirements

Pleasant Valley will comply with State and local public notice requirements when implementing the public involvement and participation program.

4.2.2.2 Decision Process

The following is the documentation for Pleasant Valley's decision process and rationale statement for the development of a stormwater public involvement and participation program. It documents the overall program and the individual BMPs, measurable goals, and responsible party for the program.

4.2.2.2.1 Involving the Public in Developing the Submittal

Pleasant Valley has involved the public in the development and submittal of the application and stormwater management program as follows:

1. Held a Public Meeting
2. Posted Public Meeting Announcements

4.2.2.2.2 Involving the Public in Program Implementation

Pleasant Valley plans to actively involve the public in the development and implementation of the stormwater program through a number of different methods selected because they are existing effective methods used by Pleasant Valley or because of EPA guidance documents that list these BMPs as effective public involvement methods.

4.2.2.2.3 Target Audiences to Involve in Program

The target audiences for the permittee's public involvement program are:

1. Citizens (Homeowners)
2. Business Owners
3. Local Elected Officials
4. Youth
5. Seniors
6. Civic Organizations

4.2.2.2.4 Public Involvement Activities

Pleasant Valley plans will involve the public through the activities described below:

	Year 1	Year 2	Year 3	Year 4	Year 5
Hold Public Meetings	×	×	×	×	×
Develop Storm Drain Stenciling Program			×		

4.2.2.2.5 Person Responsible

The person responsible for the overall management and implementation of the permittee's stormwater public involvement/participation program is the **DIRECTOR OF PUBLIC WORKS**. Others will be involved in the execution of each of the individual activities in the program.

4.2.2.2.6 Goal Selected

Pleasant Valley selected the measurable goals of each of the BMPs after reviewing EPA & ASCE research on the effectiveness of certain BMPs. The BMPs selected were chosen because of evidence that they will have a positive impact on the target pollutants identified as a concern for Pleasant Valley. Some of the public involvement methods selected were also chosen because they have been used effectively by Pleasant Valley in the past. The implementation of BMPs selected will determine the success of the measure on water quality.

MCM #3: Illicit Discharge Detection and Elimination

4.2.3.1 Permit Requirement

4.2.3.1.1 Overview

Pleasant Valley will develop, implement and enforce a program to detect and eliminate illicit discharges (as defined in 10 CSR 20-6.200) into their small MS4.

4.2.3.1.2 Map

Pleasant Valley will develop a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the State that receive discharges from those outfalls.

The map will be developed using:

	Year 1	Year 2	Year 3	Year 4	Year 5
Storm Sewer Mapping			×		
Aerial Photography	×	×	×	×	×
Public Complaints	×	×	×	×	×

4.2.3.1.3 Enforcement

Pleasant Valley will effectively prohibit non-stormwater discharges into the stormwater system of Pleasant Valley's stormwater system via the following ordinances and regulations. Each ordinance/regulation is enforceable by Pleasant Valley with appropriate procedures and consequential actions.

4.2.3.1.4 Methods to Detect

Pleasant Valley will implement a plan using the following methods to detect and address non-stormwater discharges, including illegal dumping to the stormwater system.

	Year 1	Year 2	Year 3	Year 4	Year 5
Visual Inspection	×	×	×	×	×
Public Watch Programs	×	×	×	×	×

4.2.3.1.5 Informing the Public

Pleasant Valley will inform public employees, businesses owners, and the general public of hazards associated with illegal discharges and improper disposal of waste as needed.

4.2.3.1.6 Not Significant Contributors

Pleasant Valley has not identified any of the following categories of non-stormwater discharges or flows (i.e. illicit discharges) as significant contributors of pollutants to their small MS4; water-line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined in 10 CSR 20-6.200), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air drains, lawn watering, flows from riparian habitats and wetlands, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-stormwater and will only be addressed where they are identified as significant sources of pollutants to waters of the State).

4.2.3.1.7 Occasional Incidental Non-Stormwater Discharges

Pleasant Valley's illicit discharge ordinance does not include a list of other similar occasional incidental non-stormwater discharges (e.g. non-commercial or charity car washes, etc) that will not be addressed as illicit discharges because they are not reasonably significant sources of pollutants to the MS4. Should these occasional or incidental non-stormwater discharges be identified in the future, those entities responsible for discharging will be prohibited or conditions placed on them so as to minimize their discharge of pollutants.

4.2.3.2 Decision Process

Pleasant Valley has documented their decision process for the development of stormwater illicit discharge detection and elimination program. Pleasant Valley's' rationale statement addresses their overall illicit discharge detection and elimination program and the individual BMPs, measurable goals, and responsible persons for their program.

4.2.3.2.1 Sources for Mapping

Pleasant Valley will develop a storm sewer map showing the location of all outfalls and the names and location of all receiving waters. Pleasant Valley used the following sources to compile the maps:

1. Storm Sewer mapping
2. Aerial Photography
3. Public Complaints

Once the map is established, Pleasant Valley will use proposed building plans to locate new outfalls and update the maps.

4.2.3.2.2 Regulatory Mechanism

Pleasant Valley will continue to enforce the ordinances relating to illicit discharges as well as use the following mechanism to effectively prohibit illicit discharges to the MS4:

1. Inspection upon Complaint

This mechanism was selected because ordinances are commonly used by Pleasant Valley to establish laws and set forth the enforcement mechanisms. The ordinance establishes legal authority; to regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) of stormwater discharges by any use; to prohibit illicit connections and discharges to the MS4; and to establish legal authority to carry out all inspections, surveillance, and monitoring procedures necessary to ensure compliance.

Pleasant Valley will continue to enforce the ordinances relating to illicit discharges as well as use the following mechanism to effectively prohibit illicit discharges to the MS4 on the respective schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Inspection upon Complaint	X	X	X	X	X

4.2.3.2.3 Enforcement

Pleasant Valley will set forth in the ordinance enforcement procedures intended to remove the source of the illicit discharge detected.

Pleasant Valley will ensure implementation of the mechanisms described in 4.2.2.2.2 above with the following enforcement actions:

	Year 1	Year 2	Year 3	Year 4	Year 5
Civil Penalties	X	X	X	X	X

4.2.3.2.4 Detection

Pleasant Valley will detect and address illicit discharges to the MS4, including discharges from illegal dumping and spills. Pleasant Valley's program will address on-site sewage disposal systems that flow into the MS4.

4.2.3.2.4.1 Identify Priority Areas

Pleasant Valley will use the system maps identified in 4.2.3.1.2 above and other data to identify priority areas with likelihood of illicit connections.

4.2.3.2.4.2 Trace the Source - Not Applicable

4.2.3.2.4.3 Removal

Pleasant Valley will follow the ordinance adopted and the enforcement mechanisms detailed in the ordinance including those legal actions described in 4.2.3.1.3 above to enforce the removal of an identified illicit connection.

4.2.3.2.4.4 Program Evaluation

The success of the described program will be evaluated annually by analyzing the number of illicit connections discovered and eliminated.

4.2.3.2.5 Public Information

Pleasant Valley will inform public employees, business owners, and the general public of hazards associated with illegal discharges and improper disposal of waste as needed.

Where applicable, the information distributed through these means will coordinate with the information distributed in the Public Education minimum control measure (e.g., consistent/coordinated messages in literature).

4.2.3.2.6 Responsible Party

The **DIRECTOR OF PUBLIC WORKS** will be responsible for overall management and implementation of Pleasant Valley's stormwater illicit discharge detection and elimination program. Others will be involved in the execution of each of the individual activities in the programs.

4.2.3.2.7 Measurable Goals

Pleasant Valley will evaluate the success of the program based on:

The number of illicit connections found and eliminated.

Pleasant Valley selected the measurable goals for each of the BMPs after reviewing EPA & ASCE research on the effectiveness of certain BMPs. The BMPs selected were chosen because of the evidence that they will have a positive impact on the target pollutants identified as a concern for Pleasant Valley. Some of the methods to detect and eliminate illicit discharges were also chosen because they have been used effectively by Pleasant Valley in the past. The implementation of BMPs selected will determine the success of the measure on water quality.

MCM #4: Construction Site Stormwater Run-off Control

4.2.4.1 Permit Requirements

Pleasant Valley plans to continue to enforce its policies and procedures concerning construction site stormwater run-off control to from construction activities that result in disturbance of greater than or equal to one acre. Pleasant Valley also plans to reduce pollutants in stormwater run-off from construction activities that disturb an area less than one acre if the site is part of a larger common plan of development or sale.

4.2.4.1.1 Regulatory Mechanism

Pleasant Valley will continue to use its adopted ordinance with the required erosion and sediment controls, as well as sanctions to continue to ensure compliance.

4.2.4.1.2 Best Management Practices (BMPs)

Pleasant Valley will continue to require construction site operators to implement the appropriate erosion and sediment control best Management Practices (BMP's), based on the adopted Kansas City Metro American Public Works Association (APWA)'s Erosion and Sediment Control Manual, which includes the construction specifications and design standards.

4.2.4.1.3 Wastes to Be Controlled

Pleasant Valley will continue to require construction site operators to control wastes that may cause adverse impacts to water quality such as:

1. Discarded Building materials
2. Concrete Truck Wash-out
3. Sediment
4. Litter or Trash
5. Sanitary Waste

4.2.4.1.4 Site Plan Review

Pleasant Valley will continue to utilize the procedures in their ordinance for site plan review, which will incorporate consideration of potential water quality impacts.

4.2.4.1.5 Receipt & Consideration of Public comment

Pleasant Valley will continue to accept and evaluate any information submitted by the public.

4.2.4.1.6 Site Inspection

Pleasant Valley will continue to perform inspections on all construction sites as well as enforce proper erosion and sediment control measures.

4.2.4.2 Decision Process

The following is the rationale statement for the development of Pleasant Valley's overall construction site stormwater run-off control program. It documents the individual BMPs, measurable goals, and responsible party for their program.

4.2.4.2.1 Regulatory Mechanism

Pleasant Valley will continue to enforce the adopted Kansas City Erosion and Sediment Control Manual, which requires the use of proper erosion and sediment controls on construction sites. This ordinance outlines the requirements for designers and contractors before, during and after the construction activities. The ordinance will provide enforcement measures for designers and contractors who do not follow the ordinance.

Other mechanisms that will be available to anyone involved in design and construction of erosion and sediment control activities. Those mechanisms include:

	Year 1	Year 2	Year 3	Year 4	Year 5
Design Methodologies	×	×	×	×	×
BMP Fact Sheets	×	×	×	×	×
Sample Plans	×	×	×	×	×
Construction Specifications	×	×	×	×	×
Standard Details	×	×	×	×	×
Ordinance	×	×	×	×	×

4.2.4.2.2 Enforcement

Pleasant Valley will ensure compliance with the adopted ordinance by enforcing the enforcement section in the ordinance detailing the sanctions and enforcement mechanisms. Pleasant Valley will use the following sanctions:

1. Non-monetary Penalties(such as Stop Orders)

2. Bonding Requirements (Escrow)

3. Ordinance

4.2.4.2.3 Implementation of Proper Controls

Pleasant Valley will require construction site operators to control wastes that may have adverse impacts on water quality including:

	Year 1	Year 2	Year 3	Year 4	Year 5
Implementation of Proper Erosion and Sediment Controls	×	×	×	×	×

4.2.4.2.4 Pre-Construction Site plan Review

Pleasant Valley will continue to enforce procedures for site plan review, including the review of pre-construction plans, which will look at the potential water quality impacts. The estimated percentage of sites that will have a pre-construction site plan review is 100%.

	Year 1	Year 2	Year 3	Year 4	Year 5
Review of Construction Plans	×	×	×	×	×

4.2.4.2.5 Public Input on Submittals

Pleasant Valley will not implement procedures for receipt and consideration of information submitted by the public regarding construction site runoff control procedures.

4.2.4.2.6 Site Inspection & Enforcement

Pleasant Valley will continue to inspect all construction sites using a priority rating system.

The site with the most potential risk to the stormwater quality will be top on the priority list.

	Year 1	Year 2	Year 3	Year 4	Year 5
Site Inspection and Enforcement	×	×	×	×	×

4.2.4.2.7 Person Responsible

The person responsible for overall management and implementation of the permittee's stormwater public education and outreach program is the **DIRECTOR OF PUBLIC WORKS.**

Others will be involved in the execution of each of the individual activities in the programs.

4.2.4.2.8 Measurable Goals

Pleasant Valley selected the measurable goals for each of the BMPs after reviewing EPA & ASCE research on the effectiveness of certain BMPs. The BMPs selected were chosen because of the evidence that they will have a positive impact on the target pollutants identified for Pleasant Valley. The implementation of BMPs selected will determine the success of the measure on water quality.

MCM #5: Post-Construction stormwater Management in New Development and Re-Development

4.2.5.1 Permit Requirement

4.2.5.1.1 Overview

Pleasant Valley will continue to enforce its program that addresses stormwater run-off from new development and re-development projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.

4.2.5.1.2 Strategies

Pleasant Valley will develop and implement strategies, which will include a combination of structural and/or non-structural Best Management Practices (BMPs), appropriate for the community.

4.2.5.1.3 Ordinance

Pleasant Valley will use the adopted Kansas City Erosion and Sediment Control Manual to address post-construction run-off from new development and re-development projects to the extent allowable under State or Local law.

4.2.5.1.4 Long-Term Operation & Maintenance

Pleasant Valley will ensure adequate long-term operation and maintenance of BMPs.

4.2.5.2 Decision Process

The following is the rationale statement for the development of a post-construction stormwater management program. It documents the BMPs measurable goals, and responsible party for the program.

4.2.5.2.14 Priority Areas

Pleasant Valley will implement regulatory procedures to address stormwater run-off from new development and re-development projects. There are no areas identified as a priority for regulatory procedures.

4.2.5.2.2 Regulatory Procedures

Pleasant Valley will enforce regulatory procedures that will be specifically tailored for the community to minimize water quality impacts.

	Year	Year 2	Year 3	Year 4	Year 5
Enforcement of regulatory procedures based on Kansas City Erosion and Sediment Control Manual	X	X	X	X	X

4.2.5.2.3 Non-Structural Best Management Practices (BMPs)

4.2.5.2.3.1 Policies & Ordinances

Pleasant Valley will implement policies and ordinances that will help minimize water quality impacts.

	Year 1	Year 2	Year 3	Year 4	Year 5
Maintain and/or Increase Open Space	X	X	X	X	X

4.2.5.2.3.2 In-fill Development

Not Applicable

4.2.5.2.3.3 Education

Pleasant Valley will implement education programs for developers and the public about project designs that minimize water quality impacts.

4.2.5.2.3.4 Other Non-Structural Measures

Not Applicable

4.2.5.2.4 Structural BMPS

Pleasant Valley will implement the following structural BMPs:

	Year 1	Year 2	Year 3	Year 4	Year 5
Detention/Retention	X	X	X	X	X

4.2.5.2.5 Regulatory Mechanism

Pleasant Valley will continue to enforce regulatory mechanisms to address post-construction run-off from new developments and re-developments. These mechanisms will help to not only

require proper practices, but will help enforce the proper use of the practices under certain circumstances.

Pleasant Valley will ensure compliance with the developed ordinance by way of sanctions and enforcement mechanisms. Pleasant Valley will implement the following sanctions in their ordinance:

1. Non-monetary Penalties (such as Stop Work Orders)
2. Bonding Requirements
3. Ordinance

4.2.5.2.6 Long-Term Operation & Maintenance

Pleasant Valley will implement options to help ensure the long-term operation and maintenance of their selected BMPs. These options will help ensure that future operation and maintenance responsibilities are clearly identified.

4.2.5.2.7 Responsible Party

The person responsible for overall management and implementation of the permittee's stormwater public education and outreach program is the **DIRECTOR OF PUBLIC WORKS.** Others will be involved in the execution of each of the individual activities in the programs.

4.2.5.2.8 Measurable Goals

Pleasant Valley selected the measurable goals for each of the BMPs after reviewing EPA & ASCE research on the effectiveness of certain BMPs. The BMPs selected were chosen because of the evidence that they will have a positive impact on the target pollutants identified as a concern for Pleasant Valley. The implementation of BMPs selected will determine the success of the measure of water quality.

MCM #6: Pollution Prevention/Good Housekeeping for Municipal Operations.

4.2.6.1 Permit Requirement

4.2.6.1.1 Overview

Pleasant Valley will develop and implement an operation and maintenance program that has the ultimate goal of preventing or reducing pollutant run-off from municipal operations.

4.2.6.1.2 Training

Using training materials that are available from EPA, State and other organizations, Pleasant Valley's program will include employee training to prevent and reduce stormwater pollution from activities.

4.2.6.2 Decision Process

Pleasant Valley has documented their decision process for the development of a pollution prevention/good housekeeping program and the individual BMPs, measurable goals; and responsible persons for the program. The rationale statement is as follows:

4.2.6.2.1 Pollution Prevention & good Housekeeping Measures

Pleasant Valley will implement pollution prevention and good housekeeping measures in the following City activities:

	Year 1	Year 2	Year 3	Year 4	Year 5
Catch Basin Cleaning	×	×	×	×	×
Street Sweeping**					
Recycling Program		×	×	×	×
Employee Training			×	×	×

* *The streets in Pleasant Valley are regularly swept by hand after the Fourth of July, as well as any instances where trash, salt/sand, glass, or other potential pollutants have accumulated. City wide street sweeping is only performed if there is an abundant amount of salt/sand residue left over from the previous winter's snow removal operations.

4.2.6.2.2 Employee Training

Pleasant Valley will formalize and implement an employee-training program in the following areas so as to prevent and reduce stormwater pollution from the following activities:

	Year 1	Year 2	Year 3	Year 4	Year 5
Fleet and Building Maintenance			X	X	X
Street Maintenance			X	X	X
Snow removal Operations			X	X	X

These activities will be coordinated with the outreach programs developed for the public information and illicit discharge minimum control measures so that a consistent message is present throughout Pleasant Valley's program.

4.2.6.2.3 Activities

Pleasant Valley's program will address the following areas:

4.2.6.2.3.1 Clean-up Activities

The following activities will be formalized and implemented to reduce the floatables and other pollutants in the MS4:

	Year 1	Year 2	Year 3	Year 4	Year 5
Catch Basin Cleaning	X	X	X	X	X
Street Sweeping*					

* The streets in Pleasant Valley are regularly swept by hand after the Fourth of July, as well as any instances where trash, salt/sand, glass, or other potential pollutants have accumulated. City wide street sweeping is only performed if there is an abundant amount of salt/sand residue left over from the previous winter's snow removal operations.

4.2.6.2.3.2 Pollutant Locations

Pleasant Valley would like to reduce or eliminate the discharged pollutants from the following locations:

1. Streets
2. Municipal Parking Lots
3. Fleet or Maintenance Shops with Outdoor Storage Areas

The following controls and/or programs will be implemented to reduce or eliminate the discharge of pollutants from facilities owned by Pleasant Valley:

	Year 1	Year 2	Year 3	Year 4	Year 5
Recycling Program		X	X	X	X
Employee Training			X	X	X

4.2.6.2.3.3 Pollutant Removal

Pleasant Valley will implement training procedures for the removal of dredge spoil, accumulated sediments, floatables, and other debris.

4.2.6.2.3.4 Flood Management

Pleasant Valley will review their current regulations concerning flood management to ensure they allow for:

1. Assessment and implementation of solutions that address impacts to water quality for new projects and;
2. Review of existing projects for inclusion of water quality aspects.

4.2.6.2.4 Responsible Party

The **DIRECTOR OF PUBLIC WORKS** will be responsible for overall management and implementation of the pollution prevention and good housekeeping program for Pleasant Valley. Others will be involved in the execution of each of the individual activities in the programs.

4.2.3.2.5 Program Evaluation

Pleasant Valley will evaluate the success of the pollution prevention/good housekeeping minimum control measure by tracking the progress of each measure against the implementation schedule. Each one of the measures described in the permit was chosen based on its implementability by Pleasant Valley staff and impact on water quality.

Attachment to "Information on Critical Areas" - page 3

Policy Coordination Unit.
P. O. Box 180
Jefferson City, MO 65102
Prepared by: Shannon Cave
shannon.cave@mdc.mo.gov
573-522-4115X3250

Missouri Department of Conservation

Heritage Review Report

October 13, 2009 -- Page 1 of 2

Kevin Cronk City of Pleasant Valley 6500 Royal Street Pleasant Valley, Missouri 64068 KCronk@PleasantValleyMO.org	Project type:	Concern assessment
	Location/Scope:	City of Pleasant Valley Sections 22, 23 and 27 T51N R32W
	County:	Clay
	Query received:	October 13, 2009, by email
	Authenticity may be confirmed by Policy Coordination Unit, Missouri Department of Conservation, 573-522-4115.	

This NATURAL HERITAGE REVIEW is not a site clearance letter. Rather, it identifies public lands and sensitive resources known to have been located close to and/or potentially affected by the proposed project. On-site verification is the responsibility of the project. Heritage records were identified at some date and location. This report considers records near but not necessarily at the project site. Animals move and, over time, so do plant communities. To say "there is a record" does not mean the species/habitat is still there. To say that "there is no record" does not mean a protected species will not be encountered. These records only provide one reference and other information (e.g. wetland or soils maps, on-site inspections or surveys) should be considered. Look for additional information about the biological and habitat needs of records listed in order to avoid or minimize impacts. More information may be found at www.mdc.mo.gov/nathis/endangered/ and mdc4.mdc.mo.gov/applications/mofwis/mofwis_search1.aspx. Contact information for the department's Natural History Biologist is online at http://www.mdc.mo.gov/nathis/contacts/.

Level 3 issues: Records of federal-listed (also state-listed) species or critical habitats near the project site:

Heritage records identify no wildlife preserves, no designated wilderness areas or critical habitats, no state or federal endangered-list species records within one mile of the Pleasant Valley City limits, or in public land survey sections 8-17 and 20-29 of T51N R32W.

- *The project should be managed to minimize erosion and sedimentation/runoff to nearby streams and lakes, including adherence to any "Clean Water Permit" conditions.*
- *Revegetate areas in which the natural cover is disturbed to minimize erosion. Use native plant species compatible with the local landscape and wildlife needs when possible.*
- *Pollutants, including sediment, can have significant impacts far downstream. Use silt fences and/or vegetative filter strips to buffer streams and drainages, and monitor those after rain events and until a well-rooted ground cover is reestablished.*

FEDERAL LIST species/habitats are protected under the Federal Endangered Species Act. Consult with the U.S. Fish and Wildlife Service (101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; 573-234-2132).

General recommendations related to this project or site, or based on information about the historic range of species (unrelated to any specific heritage records):

- Streams in the area should be protected from soil erosion, water pollution and in-stream activities that modify or diminish aquatic habitats. Best management recommendations relating to streams and rivers may be found at http://mdc.mo.gov/79.
- Invasive exotic species are a significant issue for fish, wildlife and agriculture in Missouri. Seeds, eggs, and larvae may be moved to new sites on boats or construction equipment, so inspect and clean equipment thoroughly before moving between project sites.
  - Remove any mud, soil, trash, plants or animals from equipment before leaving any water body

or work area.

- Drain water from boats and machinery that have operated in water, checking motor cavities, live-well, bilge and transom wells, tracks, buckets, and any other water reservoirs.
- When possible, wash and rinse equipment thoroughly with hard spray or HOT water (≧104° F, typically available at do-it-yourself carwash sites), and dry in the hot sun before using again.

These recommendations are ones project managers might prudently consider based on a general understanding of species needs and landscape conditions. Heritage records largely reflect only sites visited by specialists in the last 30 years. This means that many privately owned tracts could host remnants of species once but no longer common.

Pre-screen heritage data requests at http://tinyurl.com/heritagereview. A "Level 1 response" makes further submission to MDC or USFWS unnecessary.