# Lake Havasu City Stormwater Management Plan



Draft
Revised September 2025

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# 1.0 Purpose

Lake Havasu City has completed 2024-25 Storm water Management Program (SWMP) to establish a more useful and up-to-date guide for the future of stormwater management activities throughout the City. This report focuses on Low Impact Development methods as discussed with Leslie Davidson of Arizona Department of Environmental Quality (ADEQ) in an e-mail dated June 28, 2024. The program specifically considers the six Minimum Control Measures (MCMs) outlined in the ADEQ General Permit AZG2021-002 for Small Municipal Storm Sewer Systems (MS4).

The Best Management Practices (BMP's) & LID's presented here have been proposed because they address the MCM's and are appropriate for Lake Havasu City's stormwater system. These MCM's are measurable, anticipated to make significant improvements in the City's stormwater quality and are achievable. For each BMP, achievable and appropriate goals are delineated along with a schedule indicating frequency of action items, objectives, and a date by which the BMP or LID shall be implemented and established.

The goal of this program is to protect the water resources so many of our current and future residents can enjoy such as: fishing, boating, the beautiful aquatic and wildlife that calls this area home. By implementation and compliance with federal and state regulations, the community can control the adverse impact pollution can have on the receiving waters of Lake Havasu.

The SWMP describes the policies and procedures the City will implement to reduce, to the maximum extent practicable (MEP), pollutant discharges to and from the small municipal separate storm sewer system (MS4). The overall goal of the program is to ensure to the MEP that discharges from the MS4 do not cause or contribute to exceedances of surface water quality standards.

As required by the Permit, the SWMP addresses the six minimum control measures (IMCMs):

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination Program
- Construction Activity Stormwater Runoff Control
- Post-Construction Stormwater Management in New Development and Redevelopment
- Pollution Prevention and Good Housekeeping for Municipal Operations

The SWMP is designed to be a comprehensive program document outlining how the stormwater program is implemented and maintained. The SWMP reflects the needs and constraints of the City.

Outreach and enforcement materials are located on the City Website at https://www.lhcaz.gov/public-works/storm-water-management

The City uses the following documents to administer the MS4.

- Authority for enforcing the program is contained within City Code. Links to the City Code can be found at: https://codelibrary.amlegal.com/codes/lakehavasucity/latest/overview
- The City Council adopted Health and Safety for Lake Havasu City- Stormwater which details how enforcement is administered. https://www.lhcaz.gov/public-works/storm-water-management

- Construction design and requirements for an erosion control manual are contained in the Stormwater Management Design Manual, which can be found at: https://www.lhcaz.gov/public-works/storm-water-management
- The City utilizes a Low Impact Development design for Post Construction. The LID manual can be found at: <a href="https://www.lhcaz.gov/public-works/storm-water-management">https://www.lhcaz.gov/public-works/storm-water-management</a> & Appendix J.
- The Illicit Discharge Detection and Elimination (IDDE) Plan is contained in Appendix C. Illicit Discharge reporting can be found in Appendix G.

# 2.0 Permit Coverage Area

The City of Lake Havasu City is located in Mohave County in the Colorado River Watershed. Lake Havasu is a part of this watershed making Lake Havasu City one of the largest populated developments in this watershed. There are 6 sub basins with 3 divided among the southern region of the watershed around Lake Havasu City and 3 split up evenly up the Mohave valley. In this watershed the Colorado River travels south through the Mohave Valley. This valley is made up of the El Dorado Mountains and the Black Mountains which also are the borders of the divisions of watersheds. The outlet for the watershed is also the Colorado River. This river travels right through the watershed making it the source as well as the outlet.

The incorporated City limit encompasses approximately 46.4 square miles. The SWMP covers discharges within the City of Lake Havasu City Industrialized boundaries but is focused on the urbanized area. Figure 1 below shows the City boundaries. The blue dashed line marks the City Limits and purple are the receiving waters of Lake Havasu.

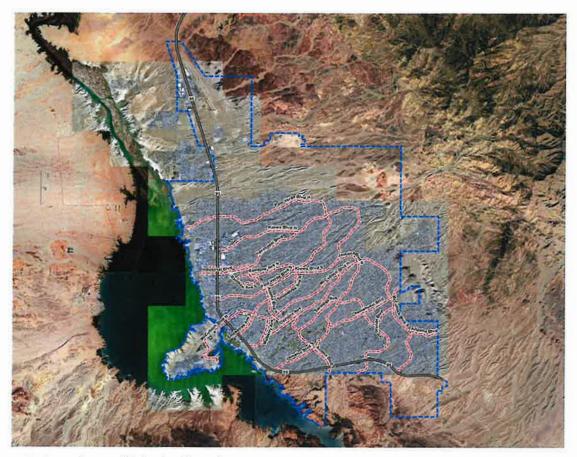


Figure 1 - City boundary and Urbanized boundary

# 3.0 Receiving Waters

Stormwater runoff is transported via streets, open channels, and other conveyances. The main use of conveyance are though Lake Havasu City's 9 washes listed section 7, Analytical Monitoring. All 9 outfall locations convey stormwater to the Water of the United States. Currently we have a selenium impairment which we test for in the stormwater characterization reports. In last 2023 stormwater characterization no selenium was detected in the cities run off.

# 4.0 Storm Sewer System Mapping

The City has an up-to-date map of the municipal separate storm sewer system. Mapping is completed as now construction and infrastructure is developed. The City mapping includes:

- Storm sewer system (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains that are owned or operated by the permittee and convey stormwater to Waters of the U.S.),
- · Location of all outfalls, and
- · Name and location of all Waters of the U.S. that receive discharges from outfalls.

# 5.0 Listing of Discharges

The City maintains a record of discharges that may contribute to the exceedance of an applicable surface water quality standard. Since there is impaired or outstanding waters in the Lake Havasu City Urbanized area, the only standards that apply are the narrative water quality standards. The record is available on request.

# 6.0 Minimum Control Measures (MCM's)

The City has evaluated the permit requirements for the six MCM's specified in Part 6.0 of the general permit. Based on that review, the City has selected BMPs for each MCM that the City believes will accomplish the goal of minimizing pollution from stormwater runoff to the MEP. Each BMP is then broken down into measurable goals to accomplish the BMP. For this permit cycle, the City has maintained many of the same best management practices as the previous permit cycle and is enhancing or modifying them as necessary to meet the requirements of this new permit.

For each BMP that has been established, the City has identified the following:

- Start date for implementation of the BMP
- Responsible Department/ Position
- Measurable goals for tracking the effectiveness of each BMP
- Methods for assessing the overall effectiveness of each BMP

# 6.1 Public Education and Outreach

6.1.1 The City shall provide public education, outreach to at least one target group, which includes General Public, Residential Community, Homeowners, and Schools. The outreach will focus on conveying relevant messages using one or more appropriate topics listed below during each year of the permit term.

- a. Post-construction ordinances and long-term maintenance requirements for permanent stormwater controls.
- b. Stormwater runoff issues and residential stormwater management practices.
- c. Potential water quality impacts of application of pesticides, herbicides and fertilizer and control measures to minimize runoff of pollutants in stormwater.
- d. Potential impacts of animal waste on water quality and the need to clean up and properly dispose of pet waste to minimize runoff of pollutants in stormwater.
- e. Illicit discharges and illegal dumping, proper management of non-stormwater discharges, and to provide information on reporting spills, dumping, and illicit discharges.
- f. Spill prevention, proper handling and disposal of toxic and hazardous materials, and measures to contain and minimize discharges to the storm sewer system.
- g. Installation of catch basin markers or stenciling of storm sewer inlets to minimize illicit discharges and illegal dumping to storm sewer system.
- h. Proper management and disposal of used oil; or
- i. Community activities (monitoring programs, environmental protection organization activities, etc.).
- 6.1.2 The City shall provide public education, outreach to at least one target group, which includes Development, Community/Homeowner Association, Construction Site Operators, Targeted Sources or Types of Businesses (industrial or commercial). The outreach will focus on conveying relevant messages using one or more appropriate topics listed below during each year of the permit term.
  - a. Planning ordinances and grading and drainage design standards for stormwater management in new developments and significant redevelopments
  - b. Post-construction ordinances and long-term maintenance requirements for permanent stormwater controls;
  - c. Municipal stormwater requirements and stormwater management practices for construction sites;
  - d. Illicit discharges and proper management of non-stormwater discharges;
  - e. Spill prevention, proper handling of toxic and hazardous materials, and measures to contain and minimize discharges to the storm sewer system;
  - f. Proper management and disposal of used oil and other hazardous or toxic materials, including practices to minimize exposure of materials/wastes to rainfall and minimize contamination of stormwater runoff;
  - g. Stormwater management practices, pollution prevention plans, and facility maintenance procedures; or
  - h. Water quality impacts associated with land development (including new construction and redevelopment).
- 6.1.3 The program shall focus on messages for specific audiences as well as show progress toward the defined educational goals of the program. The permittee shall identify methods that it will use to evaluate the effectiveness of the educational messages and the overall education program. Any methods used to evaluate the effectiveness of the program shall be tied to the defined goals of the program and the overall objective of changes in behavior and knowledge.
- 6.1.4. The City shall modify any ineffective messages and report in the annual report.

# 6.2 Public Involvement and Participation

- 6.2.1 The SWMP and all annual reports shall be available to the public. The current SWMP and annual report in subsequent years shall be posted no later than 30-days of the due date of the annual report.
- 6.2.2. The permittee shall annually provide the public an opportunity to participate in the review, revisions, updates, and implementation of the SWMP.

- 6.2.3. The permittee shall create opportunities for citizens to participate in the implementation of stormwater controls, for example, but not limited to:
  - a. Stream clean-ups
  - b. Storm drain stenciling.
  - c. Volunteer monitoring.
  - d. Disposal of household hazardous waste.
  - e. Educational activities; and
  - f. Facilitation of Household Hazardous Waste Dump Day, Continue Havasu Beautiful Clean Up, River/Wash Clean Up Day.
- 6.2.4. The permittee shall provide and publicize a reporting system to facilitate and track public reporting of spills, discharges and/or dumping to the MS4 on a continuous basis.
- 6.2.5. Details of the public involvement and participation program in the SWMP.

# 6.3 Illicit Discharge Detection and Elimination (IDDE) Programs

The City developed an IDDE program to detect and eliminate illicit discharges into the MS4. The IDDE program is included as Appendix C. Additionally, the City maintains the following:

#### 6.3.1. Storm Sewer Map

The City maintains up-to-date map of the MS4 to identify and isolate illicit discharges. The map includes:

- i. drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man—made channels, or storm drains that are owned or operated by the City to convey stormwater to a protected surface water.
- ii. The location of all outfalls; and
- iii. The name and location of all protected surface waters that receive discharges from outfalls.

#### 6.3.2. Enforcement Procedures

The City prohibits non-stormwater discharges into the storm sewer system by Lake Havasu City Code, Ordinance 14-1105. § 1.12.020 DUTY TO ENFORCE THE CODE & § 1.12.040 VIOLATION A CIVIL INFRACTION—PENALTY. For all stormwater related codes please refer to §8.28, specifically § 8.28.160 ENFORCEMENT.

A. A violation of this chapter shall be enforced as described in Chapter 1.12 of this code. The City Engineer or designee is authorized to enforce the provisions of this chapter.

#### 6.3.3 Statement of IDDE Program Responsibilities

The city includes the lead municipal agency or department responsible for implementing the IDDE Program as well as any other agencies or departments that may have responsibilities for aspects of the program.

#### 6.3.4. Illicit Discharge Detection and Elimination Reporting

The city will include a summary of IDDE activities in the annual report.

6.3.5. Illicit discharges to the MS4 are eliminated when discovered, as outlined in the Enforcement Response Plan.

#### 6.3.7. Visual Monitoring

The city has a visual dry weather and wet weather monitoring program to identify, monitor, and eliminate illicit discharges; and to ensure compliance with effluent limitations. The dry and wet weather programs are included as Appendix C. The City shall visually monitor at least 20% of all outfalls each year. Follow-up screening is also included in Appendix C.

#### 6.4.9. Staff Training

The City will provide annual training to employees involved in the IDDE program (e.g., street workers, inspectors, solid waste personnel, etc.). The training shall include the IDDE program components and how to recognize illicit discharges. The training may be provided virtually. For Staff Training Materials and Employee Attendance are included in Appendix H.

#### 6.4.10. AZPDES Non-Filers

The City will report suspected non-filers, as identified in the attached AZPDES Non-Files program in Appendix C to ADEQ at AZPDES@azdeq.gov on a monthly basis ONLY when there are non-filers to report. The report will include, the facility name and location of the suspected non-filer. The email subject line will include "Non-filer — MS4 Permittee Name."

# 6.4 Construction Activity Stormwater Runoff Control

The City has a stormwater runoff control program to minimize or eliminate pollutant discharges to the MS4s from construction activities that will disturb one (1) or more acres of land, including sites less than one (1) acre that are part of a common plan of development or sale.

#### 6.4.1. Construction Activity Stormwater Runoff Implementation

The City has shall assess existing legal authority, codes, and other relevant mechanisms and adopt, and implement measures to ensure compliance with construction activity runoff timeframe(s) specified in Part 3.1.

#### 6.4.2. Construction Activity Stormwater Runoff Program Components

The City requires use of sediment and erosion control plan, pursuant to Lake Havasu City Code Chapter 13- 17 and the City Stormwater Management Design Manual.

The City's Stormwater Section maintains an inventory of all construction activities that disturb or will disturb one or more acres within the permitted area, including those that are less than one acre but are part of a larger common plan of development or sale if the larger common plan will ultimately disturb greater than one acre.

The City Stormwater Section is responsible for site inspections and enforcement of sediment and erosion control measures and maintains written procedures for site plan review. Procedures include the following:

- a. A review of the site design;
- b. The planned operations at the location of the construction activity;
- c. Planned stormwater controls during each construction phase; and
- d. The planned controls to be used to manage runoff created after development. (see 6.5)

The City Stormwater Section is responsible for site inspections and has written procedures for site inspections and enforcement of sediment and erosion control measures. A minimum of 80% of the site will be inspected.

Based on construction activity inspection findings, the City shall take all necessary follow-up actions (i.e., reinspection, enforcement) to ensure compliance in accordance with the City's enforcement response plan.

Construction site operators must follow the erosion and sediment control plan to implement BMPs appropriate for the conditions at the construction site.

Construction site operators must control wastes, including but not limited to: discarded building materials,

paints, fertilizers, concrete washout, chemicals, litter, equipment leaks, and sanitary wastes.

City staff who conduct activities related to implementing the construction stormwater program must have the knowledge, skills, and abilities to proficiently carryout their assigned duties.

The City shall continue to provide information, such as sample erosion and sediment plans, to operators to assure adequate control BMP requirements has been developed and implemented.

# 6.5 <u>Post-Construction Stormwater Management in New Development and Redevelopment</u>

The City has a program to address post-construction stormwater runoff from new development and redevelopment projects that disturb one (1) or more acres of land (or less than one (1) acre if part of a common plan of development) that discharge into the permittee's MS4.

- 6.5.2. The City utilizes a Low Impact Development (LID) design for Post Construction. The LID manual in required in City ordinance for new construction and specifies design, installation, and maintenance of post-construction stormwater controls to reduce or eliminate the discharge of pollutants from the site after construction activities are completed. Please visit Appendix J, For Low Impact Development Plan for Lake Havasu City.
- 6.5.3. Site Plan Review

The City requires a site plan review process to evaluate and approve post-construction stormwater controls.

#### See Appendix K

6.5.4. Post-Construction Stormwater Control Inventory

The City maintains an inventory system of all post-construction structural stormwater control measures on the City GIS system. The inventory is searchable by property location.

#### See Appendix K

6.5.5. Operation and Maintenance of Post-Construction BMPs

The City inspects post-construction BMPs to ensure the long-term operation and maintenance on an as-needed basis. Inspections can be complaint based or as a result of a routine inspection.

See Appendix K

# 6.6 Pollution Prevention and Good Housekeeping for Municipal Operations

The City has an operations and maintenance program that includes training to prevent or reduce pollutant runoff to protect water quality from municipal facilities and activities. Each facility is responsible for maintaining its own program. Water Services provides training to City staff. See Appendix H.

An inventory of all municipally owned and operated facilities that discharge has been developed and is included in Appendix A. The highest priority facility is the Mulberry treatment Plant, followed by the City yard and City Parks. The PWMF Lake Havasu City and the City Airport are covered under a separate Multi Sector General Permit. Annual training for City facilities is provided by Water Services. Maintenance activities, schedules, and long-term inspection procedures for structural and non-structural stormwater controls to reduce floatables, trash, and other pollutants discharged from the MS4 are the responsibility of each City facility.

The six MCM BMPs are included as Appendix A:

# 7.0 Analytical Monitoring

Analytical stormwater characterization monitoring will be conducted within the first 30 months of the permit term. Test methods will be in accordance with the Arizona Administrative Code (A.A.C.) R18-9-A905 (B). Testing will be thru existing City approved laboratories using approved test methods. SOPs used to collect wastewater samples will be utilized to collect the characterization samples. The City has a selenium impairment which has been referenced in section Sites were selected based on area collected and distributed throughout town.

7.1.2 The City has selected three outfalls for analytical stormwater characterization monitoring. These locations are as follows:

- a.. Outfall 1, Daytona Wash = Latitude- 34.458869, Longitude -114.333751
- b. Outfall 2, Pima Wash Latitude- 34.463463, Longitude- -114.355319
- c. Outfall 3, Willow Wash Latitude 34.476926, Longitude - 114.355319
- d. Outfall 4, El Dorado Wash Latitude 34.488505, Longitude -114.358466
- e. Outfall 5, Industrial Drain Latitude 34.49866, Longitude -114.361985
- f. Outfall 6, Kiowa Drain Latitude 34.501049, Longitude -114.363337
- g. Outfall 7, Havasupai Wash Latitude 34.504014, Longitude -114.34103
- h. Outfall 8, Neptune Wash Latitude 34.511447, Longitude- -114.366699
- i. Outfall 9, Felicidad Wash Latitude 34.524565, Longitude -114.333751

For a Map of the Outfall Locations can be found in Appendix F.

- 7.2.2 Characterization monitoring shall be conducted after a "qualifying" storm event. A "qualifying" storm event is at least 0.1 inches of rain received within 24 hours and discharge occurs. Sampli1ng shall be collected within 30 minutes of a discharge to the maximum extent possible.
- 7.2.3 The following information shall be collected in a sampling event:
  - a.. Date of event
  - b. Amount of rainfall (in inches)
  - c. Indication if a sample was collected or if the event was a "no discharge".
- 7.2.6 Samples for analytical monitoring shall be analyzed for the constituents listed i1n Appendix D.
- 7.3 The City has a Selenium Impairment which we believe is contributed to upstream cities. The city has monitored these outfalls and the results can be found in the discharge monitoring report Appendix E.
- 7.6 Sample results will be included in the DMR reporting in Appendix E.

# 8.0 Program Assessment and Reporting

To comply with the permit (Permit Section 8.3 Annual Report),, the City submits an annual report each year of the permit term to ADEQ.

The annual report will include all the information required in ADEQ's MyADEQ online reporting system.

# 9.0 **SWMP Implementation**

Overall responsibility for administrating the Permit and SWMP rests with the Engineering Division and Stormwater Manager. Implementing the SWMP requires participation from multiple departments throughout the City. Key supporting departments include Public Works, Engineering, Park & Recreation, Facilities & Fleet, and Development Services.

The responsibilities for each department are detailed in Appendix B. This document i1s meant to be a living document and as departments, responsibilities, personnel or any other procedures/practices cha11ge within the City, this information will be updated accordingly.

# Appendix A - Minimum Control Measures

#### STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY

#### MCM 1: Public Education and Outreach

For MCM 1- Public Education and Outreach, use the pull down menu to indicate the BMP Category (column 1). You may override the selection and type in your own BMP. Include a brief description of the BMP (column 2) including the personnel position or department(s) responsible. Describe the Measurable Goals (column 3) for each BMP, including the targeted audience such as commercial, construction, industrial or residential for MCM 1. Column 3 should include milestones, timeframes and frequencies. Insert the month and year (MM/YY) in the Start Date (column 4) to indicate the date the BMP was initiated or enter your own text to override the selection.

BMP Category (enter your own text to override the drop down menu)	BMP Description (include personnel position or department responsible)	Measurable Goals (include milestones, timeframes and frequencies) and include the Targeted Audience	
Outreach	Provide brochures on minimizing automotive, pet wastes and other pollutants from entering The City storm drains.	Brochures will be available at City Hall, displayed on the City website. Numbers will be tracked.	
Outreach	Provide Public Events for public to participate in community events	Numbers will be tracked. See Annual Report	
Special Event	The City will coordinate with MCC to provide outreach to students and other venues.	City staff will coordinate with County and MCC staff to be represented at various outreach venues. Track number of venues and visitors.	
Local PSAs	Air PSAs on local radio stations	Track number of ads, and listenership	
Video	Develop a series of videos to post on social media.	Track number of views.	
Webpage	Establish stormwater page on City's webpage. Provide outreach material and SWMP on webpage.	The City will track the number of views to evaluate use and provide updates with the annual report.	
Annual Training	City staff will train various City employees on illicit discharges and good Housekeeping practices.	Attendance at training events will be tracked, See Appendix H.	
Article	Staff will publish articles in the Facebook, a triannual publication sent To all City residents.	Provide annual record of articles published.	

#### MCM 1: Public Education and Outreach

Use this space to add any additional information for MCM1:

Lake Havasu City, as part of its public education and outreach activities, will maintain and add stormwater program information to the City's website. This will be a cost-effective and practicable way for the City to provide stormwater information to the general public.

Permit Requirement Citation: Part V, Section B.1.a

<u>Activity:</u> Implement, maintain, and update as necessary stormwater educational materials via Lake Havasu City's website. Links to other appropriate web pages (examples: ADEQ and EPA) and contact information for the City's contact personnel.

<u>Objectives:</u> To provide a web base informational section on Lake Havasu City's website to discuss the City's SWMP and local storm water issues.

#### Interim Steps and Schedule:

Research/Develop	June 23, 2023 Completed	
Materials		
Public Information added	November 13, 2023	
to Website	Completed	
Update Website	Ongoing- Annually	
Materials		

<u>Measurable Goals:</u> To provide useful information on local stormwater issues, including a copy of the SWMP and links to other resources. Lake Havasu City will also track the number of hits during the period of operation, as well as updating the information to keep current with the Arizona Pollutant Discharge Elimination System (AZPDES) general permit.

#### MCM 2: Public Involvement and Participation

For MCM 2- Public Involvement and Participation, use the pull down menu to indicate the BMP Category (column 1). You may override the selection and type in your own BMP. Include a brief description of the BMP (column 2) including the personnel position or department(s) responsible. Describe the Measurable Goals (column 3) for each BMP. Column 3 should include milestones, timeframes and frequencies. Insert the month and year (MM/YY) in the Start Date (column 4) to indicate the date The BMP was initiated or enter your own text to override the selection.

i own text to overri		
escription (include anel position or ment responsible)	Measurable Goals (include milestones, timeframes and frequencies)	
participate in a asu Beautiful	Meeting minutes and agenda are recorded for the meeting. City staff prepares annual reports.	
participate in the asu City Area I Hazardous up Day.	Attendance and activities will be recorded and reported in the annual report.	
participate in Vash Volunteer Day.	Attendance and activities will be recorded and reported in the annual report.	
rovided website ater.	Whats Up Havasu: Facebook Link. https://youtube.com/shorts/HEFdqFmwXJQ? si=BMxKX-M-Lw2m-vDT Here is the You Tube Link to The video: https://youtu.be/4Gke8m_S9iI? si=yWEzRKzVEI4byYsn https://www.lhcaz.gov/ public-works/storm-water-management	
vill make the damual report n the City's r web page.	The number of visits and downloads will be reported in the annual report.  Choose an item.	
_	weo page.	

## MCM 3: Illicit Discharge Detection and Elimination (IDDE) Program

For MCM 3- Illicit Discharge Detection and Elimination (IDDE) Program, use the pull down menu to indicate the BMP Category (column 1). You may override the selection and type in your own BMP. Include a brief description of the BMP (column 2) including the personnel position or department(s) responsible. Describe the Measurable Goals (column 3) for each BMP. Column 3 should include milestones, timeframes and frequencies. Insert the month and year (MM/YY) in the Start Date (Column 4) to indicate the date the BMP was initiated or enter your own text to override the selection.

Contract of the second	The man bridge with the minimizer of	ener your own text to override the selection.
BMP Category (enter your own text to override the drop down menu)	BMP Description (include personnel position or department responsible)	Measurable Goals (include milestones, timeframes and frequencies)
Stormwater Sewer Mapping	Staff will continue to map the City stormwater system. The system is approximately 70% Complete.	Mapping will continue and progress will be reported in the Appendix F of then annual report.
Written IDDE Procedures	The City will continue to update and modify current IDDE procedures as Needed.	Updated IDDE procedures will be included with the Appendix G annual report.
Outfall Inventory	The City will continue to update and revise the outfall inventory as Needed.	Outfall inspections and locations will be recorded in the annual report (Appendix F)
Dry Weather Screening	A minimum of 20% of outfalls will be inspected on an annual basis. 100% of outfalls will be inspected within the 5 year Permit term.	Results and locations of outfall inspections will be recorded in the annual report.
Wet Weather Monitoring	Identify five outfalls for wet weather visual monitoring. The City will identify outfalls to be easily accessible by staff during normal business Hours.	Two monitoring events will be conducted during each wet season (Summer and Winter). Results of monitoring events will be recorded in the annual report.
Implement IDDE Program	City staff will establish a direct phone line to the Stormwater Section for receipt of input from the Public, 24 hours a day.	Receive and investigate complaints concerning illicit discharges and dumping and record the resolution of complaints and concerns in the Appendix G.
Training	The City will continue to train employees in the detection, collection, and identification of illicit Discharges. Training will	See Appendix H of this report

	specifically target staff that regularly drive on City streets	
Implement IDDE Program	Direct residents to dispose of household hazardous waste to the City Hazardous Products Center (HPC).	https://www.lhcaz.gov/public-works/storm- water-management
Implement IDDE Program	City staff will keep record of commercial and industrial facilities that may require coverage under the multi sector General permit (MSGP).	List of facilities will be submitted to ADEQ each year separate of the annual report.

#### MCM 3: Illicit Discharge Detection and Elimination (IDDE) Program

Use this space to add any additional information about MCM3:

Community activities (monitoring programs, environmental protection organization activities, etc.) Illicit discharges and illegal dumping, proper management of non-stormwater discharges, and to provide information on reporting spills, dumping, and illicit discharges Installation of catch basin markers or stenciling of storm sewer inlets to minimize illicit discharges and illegal dumping to storm sewer system.

Post-construction ordinances and long-term maintenance requirements for permanent stormwater controls.

Potential impacts of animal waste on water quality and the need to clean up and properly dispose of pet waste to minimize runoff of pollutants in stormwater.

Potential water quality impacts of application of pesticides, herbicides and fertilizer and control measures to minimize runoff of pollutants in stormwater.

Proper management and disposal of used oil, spill prevention, proper handling and disposal of toxic and hazardous materials, and measures to contain and minimize discharges to the storm sewer system.

Stormwater runoff issues and residential stormwater management practices

#### Describe how the message was conveyed to the target group.

We hold quarterly public meetings where we communicate with the public in regard to concerns of illegal dumping in local washes that drain to the lake and take corrective actions when required. On earth day we hold a park clean up event to pick up trash, debris and general waste with parks and recreation staff and volunteers. We conduct regular meetings with industrial waste facilities to communicate spill prevention and proper handling of common chemical and industrial waste products. We coordinate with the public in regards to illicit discharge complaints via our website at LHCAZ.GOV under the storm water management tab. Mike Wolfe, P.E. is our lead stormwater contact at 928-680-5460 ext. 4330

Describe measures/methods used to assess the effectiveness of the message conveyed to the target group.

We have a slide show depicting several different types of Illicit Discharges. Pamphlets to our Illicit Discharge Program with a list of contacts can be found on our city website https://www.lhcaz.gov/public-works/storm-water-management. We generally will explain different types of illicit discharges by using images found on these documents. We also have a video that we share on illicit discharges for teaching staff for training purposes.

#### MCM 4: Construction Activity Stormwater Runoff Control

For MCM 4- Construction Activity Stormwater Runoff Control, use the pull down menu to indicate the BMP Category (column 1). You may override the selection and type in your own BMP. Include a brief description of the BMP (column 2) including the personnel position or department(s) responsible. Describe the Measurable Goals (column 3) for each BMP. Column 3 should include milestones, timeframes and frequencies. Insert the month and year (MM/YY) in the Start Date (column 4) to indicate The date the BMP was initiated or enter your own text to override the selection.

The date the BMP was initiated or enter your own text to override the selection.			
BMP Category (enter your own text to override the drop down menu)	BMP Description (include personnel position or department responsible)	Measurable Goals (include milestones, timeframes and frequencies	
Written Procedures	The City will use policy, as necessary, to enforce erosion and sediment control during the plan Review process.	Any changes will be reported annually.  Appendix L	
Erosion Control Ordinance	The City will develop an ordinance that requires sediment and erosion Control practices.	Progress toward an ordinance and any ordinance developed to meet this goal. See Appendix L.	
Enforcement	The City will continue to require BMPs and SWPPPs, required under ADEQ's CGP, to be submitted with plan review to control stormwater runoff from Construction activities.	Enforcement will be evaluated and any changes will be recorded in the annual report.  See Appendix L.	
Training	Continue to develop technical guidance materials and training for the design and maintenance of erosion and sediment control measures as well as other strategies to address Construction site wastes.	City staff will continue to update as needed and recany changes in the annual report.	
Inventory	The City will use Inspires, an internal tracking database to track the number of inspections and Re-inspections annually.	Number of enforcement actions will be recorded in the annual report.	

#### MCM 4: Construction Activity Stormwater Runoff Control

Use this space to add any additional information about MCM4:

The City does not have a specific sediment or erosion control ordinance, but does have the following authority under the building code:

- 1. Contractor shall submit to the Arizona Department of Environmental Quality a Notice of Intent (NOI) and a Notice of Termination (NOT) pursuant to the requirements of ARS Title 49, Chapter 2, and Article 3.1. A copy of the submitted NOI and the NOT shall be provided to the City of Lake Havasu City Stormwater Section. The NOI shall be submitted prior to issuance of any City of Lake Havasu City grading or offsite permits. The NOT shall be submitted prior to final acceptance of off-site improvements and the certificate of occupancy.
- 2. An Arizona certified or Registered Civil Engineer shall prepare and submit for review and approval a Storm water Pollution Prevention Plan (SWPPP) in accordance with the Arizona Department of
- 3. Transportation (ADOT) Best Management Practices (BMP) Manual (or other BMP's as may be approved by the Storm water Manager). Submittal shall be made concurrent with the Civil Plan submittal and attached to the Civil Plan set. Review timeframes shall be the same as other civil reviews.
- 4. Prior to commencement of Grading Activities, the SWPPP' shall be in place and the City of Lake Havasu City contacted for inspection. The grading permit shall be issued upon City of Lake Havasu City approval of the implementation of the approved SWPPP.
- 5. During construction, the SWPPP shall remain in place, and shall be maintained until project completion as witnessed by a Final Grading Certification and the filing of a NOT. Failure to maintain structural controls may result in a Stop Work Order.
- 6. In accordance with the provisions of this section, the City of Lake Havasu City may withhold permits, occupancy or enforce by other remedy in order to ensure compliance.

### MCM 5: Post-Construction Stormwater Management in New Development and Redevelopment

For MCM 5- Post-Construction Stormwater Management in New Development and Redevelopment, use the pull down menu to indicate the BMP Category (column 1). You may override the selection and type in your own BMP. Include a brief description of the BMP (column 2) including the personnel position or department(s) responsible. Describe the Measurable Goals (column 3) For each BMP. Column 3 should include milestones, timeframes and frequencies. Insert the month and year (MM/YY) in the Start Date (column 4) to indicate the date the BMP was initiated or enter your own text to override the selection.

BMP Category (enter your own text to override the drop down menu)	BMP Description (include personnel position or department responsible)	Measurable Goals (include milestones, timeframes and frequencies)
Inspections	City will conduct post Construction site inspections.	Inspections will tracked, recorded and reported annually, Appendix K.
Green Infrastructure	The City has a Low Impact Development program for new development and redevelopment to retain stormwater on-site from Impervious surfaces.	The City will continue to review and make changes to the program as necessary.  Appendix J
Inventory	The City will develop an Inventory system for post construction activities.	Inventory will be digital and searchable.

MCM 6: Pollution I	Prevention and	d Good Housekeeping
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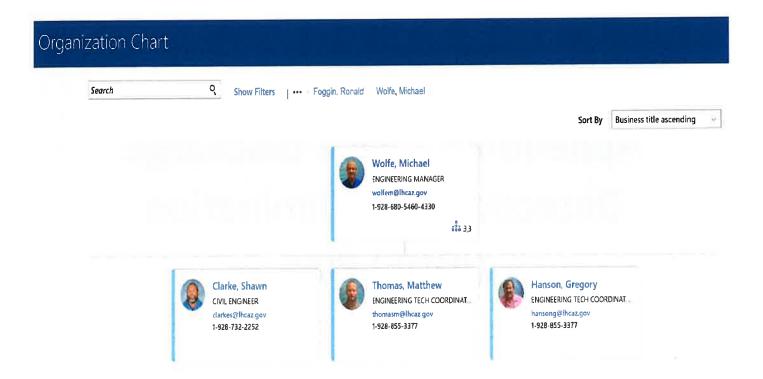
For MCM 6- Pollution Prevention and Good Housekeeping, Insert the Facility Name applicable to the MS4. Use the pull down menu to indicate the BMP Category (column 1). You may override the selection and type in your own BMP. Include a brief description of the BMP (column 2) including the personnel position or department(s) responsible. Describe the Measurable Goals (column 3) for each BMP. Column 3 should include milestones, timeframes and frequencies. Insert the month and year (MM/YY) in the Start Date (column 4) to indicate the date the BMP was initiated or enter your own text to override the Selection. For those BMPs that are not Facility specific, use the rows after the Facility Name inserts.

Selection. For those I	3MPs that are not Facility specific,	use the rows after the Facility Name inserts.	
BMP Category (enter your own text to override the drop down menu)	BMP Description (include personnel position or department responsible)	Measurable Goals (include milestones, timeframes and frequencie	
	Insert Facility Name	: Lake Havasu City Airport	
Training and Inspections	Facility will conduct annual inspections. Training Conducted by Water Services.	Training events will continue to be tracked and reported annually.  See Appendix H	
	Insert Facility Name: Pul	blic Works Maintenance Facility- Streets	
Training and Inspections	Facility will conduct annual inspections. Training Conducted by Water Services.	Training events will continue to be tracked and reported annually  Appendix H	
	Insert Facility Name: Sewe	er Department- Mulberry Treatment Plant	
Training	Facility has a no discharge waiver under the MSGP. Continue to train staff on preventing stormwater discharges.	Training events will continue to be tracked and reported annually, Appendix H.	
	Insert Fa	cility Name: Parks Department- Walnut Yard	
Training	City will continue training staff to prevent discharges To the MS4.	Training events will continue to be tracked and reported annually, Appendix H	
	Insert Facility Name:	Sweatwater/Walnut Yard- Streets Department	
Training	City will continue training staff to prevent discharges To the MS4.	Training events will continue to be tracked and reported annually, Appendix H	
	Insert Facility Nan	ne: Click here to enter text.	

Choose an item.	Click here to enter text.	Click here to enter text.	Choose an item.
Insert Pollution Prevention and Good Housekeeping BMPs that are not facility specific below			
Inventory	Staff will continue to	New facilities will be tracked and	
Inventory	determine if city facilities	Reported annually.	

# Appendix B - Roles and Responsibilities

# Lake Havasu Engineering Division Organization Chart - FY2025



# Appendix C - Illicit Discharge Detection and Elimination (IDDE) Plan

# **IDDE Program**

## **Program Elements**

The City of Lake Havasu City has implemented this Illicit Discharge Detection and Elimination Program (IDDE Program) to find and eliminate sources of non-stormwater and illicit discharges to its Municipal Separate Storm Sewer System (MS4). Procedures of the IDDE program will be implemented to prevent illicit connections and discharges to the MS4.

The City will utilize the ERP and the protocol of annual SWMP evaluation to evaluate indicators of functionality of this program and track its success. Indicators of program success are outlined in this IDDE program detailing actions required to locate and remove illicit discharges.

The City utilizes the following methods for IDDE:

- 1. Dry weather monitoring of outfalls
- 2. Wet weather monitoring of outfalls
- 3. A complaint hotline (928-680-5460 Ext 4330, Mike Wolfe P.E.)
- 4. Water Services, Public Works crews and Community Development building Inspectors to report any illicit discharge or illegal dumping to the MS4.

# Investigation of IDDE

Water Services uses an investigation system for tracing illicit discharges and illegal dumping. Illicit discharges are investigated by Water Services Watershed Specialist and Stormwater Project Managers. Other staff, including Pretreatment Inspectors may also help identify Illicit Discharges. Results of illicit discharge inspections and any resolution and enforcement are documented in an Illicit Discharge database spreadsheet. Enforcement actions follow the city code and are enforced by code enforcement officers in the City of Lake Havasu.

The City maintains a list of allowable non-Stormwater Discharges in Ordinance 14-1105 - of City Code. Residents in Lake Havasu City are typically more aware of pollution and how it can affect our waterways. Additionally, Water Services uses public education and public outreach as minimum control measures to further the program. These measures have been very effective and dramatically reduced illicit discharges. Water Services educates City field staff to detect and report illicit discharges. Any industrial facility suspected of potentially discharging to the MS4 without MSGP coverage may be identified and reported to the State Arizona Department of Environmental Quality (ADEQ). The City may not notify the facility unless an illicit discharge has occurred to the MS4.

# **Staff Training**

Water Services provides annual training for all staff involved in identifying, reporting and mitigating illicit discharges to the City's MS4 system. These staff may include Water Services Staff, Public Works staff, Building Safety Inspectors, and Community <u>Development</u>. Summary of trained staff is reported in the annual report.

# Standard Operating Procedure (SOP)

This SOP describes the procedures used to detect and report illicit discharges. The SOP will be revised as necessary. The City is implementing the following steps:

- 1. Locate important areas and locations likely to have illicit discharges with proximity to the City MS4.
- 2. Perform annual inspections of at least 20% of stormwater dry weather per the Dry Weather Outfall Program and Assessment Inspection Form.
- 3. Review and consider information collected when illicit discharge was initially identified in a previous incident or dry weather inspection.
- 4. Review procedures to remove the source of an illicit discharge.
- 5. Refer potential septic system failures to the local health office for enforcement.
- 6. Follow the City ERP for enforcement.
- 7. Perform inspections by Water Services staff while they are conducting their duties in and around the MS4 system.
- 8. Respond to Hotline calls/complaints.
- 9. Staff will contact the Stormwater Manager or Regulatory Code enforcement officer to see if they see evidence of an illicit discharge or illegal dumping to the MS4. Management will follow the ERP for enforcement.
- 10. The IDDE program will be evaluated for effectiveness and reported in the Annual report to ADEQ, as needed.

# **Dry Weather Monitoring Program**

The City will inspect approximately 20% of dry weather outfall locations during each permit year. The City currently has 73 dry weather outfall locations. This number can change as inspections during outfall inspections and new outfalls are discovered or existing outfalls are either Not City owned or not actual outfall locations. The actual outfall locations will be updated annually and be reflected on a Collector App that uses the City GIS system.

Each outfall identified must be City owned and operated and discharge to an Appendix B water as identified in the Arizona Administrative Code, Title 18, Chapter 11. Private owned outfalls are not part of the City MS4 program.

The following data will be collected for each outfall inspection:

- Sampling date
- Monitoring location (outfall ID)
- Water of the US that received the discharge
- Flow present
- Presence of floatables
- Visible deposits or staining
- Vegetation conditions
- Objectionable odors
- Evidence of illegal dumping
- Oil, grease or other pollutants
- Refuge or waste

The summary of the results of the Dry Weather Screening will be tabulated and included in the annual report.

## **Wet Weather Monitoring Program**

The City has five outfall locations in the wet weather monitoring program. The sites were selected at locations that have significant concentrations to an Appendix B Water or near the entry into an Appendix B water. The five sites are included on the City GIS system and identified in the Collector App for inspection.

The City will conduct a minimum of two (2) stormwater discharge visual monitoring inspections at each wet weather monitoring representative outfall during each summer and winter wet season. Inspections will be conducted as soon as practicable after a storm event and during regular business hours. The findings will be included in the annual report.

The wet seasons are defined as:

Summer Wet Season: June 1 through October 31 Winter Wet Season: November 1 through May 31

If City staff cannot access an outfall during a wet weather discharge, such as a snowfall or flashflood event, the City shall conduct wet weather screening as soon as practicable after the storm or discharge event.

The following data will be collected for each outfall during a storm event:

- Sampling date
- Monitoring location (outfall ID)
- Water of the US that received the discharge
- Settle-able solids observed
- Objectionable odors
- Unnatural colors
- Oil, grease or other pollutants
- Refuge or waste

The summary of the results of the Wet Weather Screening will be tabulated and included in the annual report.

# Visual Monitoring Follow-up Screening Program 6.3.7(c)

The City will investigate any illicit discharge discovered during the dry and wet weather outfall monitoring.

If an illicit discharge or illegal dumping is detected from a complaint report, dry weather outfall monitoring, or wet weather outfall monitoring; a full investigation into the pollutant source will be conducted. If the contaminant is discovered at a piped outfall, upstream manholes will be inspected to determine the discharge location. Enforcement procedure process will follow the City's adopted Enforcement Response Plan. The source will also be added to the schedule for follow-up screening in the following year outfall monitoring. All follow-up screening events will be reported on the annual report.

# **Indicators of IDDE Program Progress 6.3.8**

The City will respond to all illicit discharges as soon as practicable as and typically no later than 5 days of report or discovery. The City will an EXCEL Spreadsheet to illicit discharges to the MS4. The spreadsheet can be found on the following parameters are tracked and recorded:

- Time and Date discharge was reported or discovered
- Location or address of discharge
- Contact information and name (or identity) of person reporting discharge
- Inspector responding to discharge
- Property Owner or responsible party for location of discharge
- Inspection or efforts taken to locate discharge
- Description of discharge with photos
- Remedial action, if any, taken to discontinue or remove the discharge
- Time and date of inspection
- Response time from time of discovery or report to time of inspection
- Violations observed and follow-up inspection recommended
- Enforcement issued (Warning Letter, NOV or referral)
- Follow-up inspection date and time
- Time to close discharge investigation

The permittee shall report the findings of IDDE and report the overall effectiveness of the program in the annual program evaluation and in the annual report.

# **AZPDES Non-Filers (6.3.10)**

#### **Purpose**

Pursuant to the general permit for Small MS4s (AZG2021-002), the permittee shall develop, implement, and enforce a program to actively identify facilities and activities (e.g., industrial facilities, construction activities, etc.) that discharge to the MS4 without an AZPDES/NPDES permit.

The permittee shall include the number of facilities contacted each year in the annual report and shall include the facility name, type of activity conducted at the facility (including SIC code, to the extent known), and whether or not the facility has AZPDES permit coverage, if known or available.

A description of the permittee's illicit discharge program shall be included in the SWMP.

#### **Procedure**

The city is required to develop, implement, and enforce a program to actively identify facilities and activities (e.g., industrial facilities, construction activities, etc.) that discharge to the MS4 without an AZPDES/NPDES permit. These facilities and activities may include materials handling and storage, equipment maintenance and cleaning, industrial processing, and other operations that occur at industrial facilities and may be exposed to stormwater.

Lake Havasu City Water Services will use data to determine activities that is generated from questionnaires sent to industrial facilities by the Pretreatment Program. The Pretreatment Program uses a review of businesses licenses and online database to search for new and existing businesses that might fall into these categories: storage, manufacturing, industrial, materials handling, chemical storage, machine shops, automotive facilities, pest control, paint manufacturers, and more. Questionnaires are sent to the industrial facilities that may fall into one of these categories.

Lake Havasu City Water Services will include a review of the industrial facilities and compile the following data collected each year in the MS4 annual report:

- 1. Facility name,
- 2. Type of activity conducted at the facility (including the SIC code, to the extent known) and,
- 3. Any AZPDES permit coverage, if known or available.

# Appendix D - Stormwater Characterization Monitoring Requirements

The City shall conduct stormwater characterization monitoring for the parameters listed in Table 7.0 below, as required by Parts 7.1, 7.2, and 7.3 of this permit.

Parameter	Units	Monitoring Frequency	Monitoring Type
Metals			***
Antimony	µg/L	1x during first 24 months of permit term	Discrete
Barium	µg/L	1x during first 24 months of permit term	Discrete
Beryllium	µg/L	1x during first 24 months of permit term	Discrete
Cadmium	μg/L	1x during first 24 months of permit term	Discrete
Nickel	μg/L	1x during first 24 months of permit term	Discrete
Mercury	μg/L	1x during first 24 months of permit term	Discrete
Silver	μg/L	1x during first 24 months of permit term	Discrete
Thallium	µg/L	1x during first 24 months of permit term	Discrete
Inorganics			
Cyanide	µg/L	1x during first 24 months of permit term	Discrete
Volatile Organic Comp			
Acrolein	µg/L	1x during first 24 months of permit term	Discrete
Acrylonitrile	μg/L	1x during first 24 months of permit term	Discrete
Benzene	μg/L	1x during first 24 months of permit term	Discrete
Carbon tetrachloride	µg/L	1x during first 24 months of permit term	Discrete
Chlorobenzene	µg/L	1x during first 24 months of permit term	Discrete
Dibromochlorometha ne	μg/L	1x during first 24 months of permit term	Discrete
Chloroethane	µg/L	1x during first 24 months of permit term	Discrete

2-chloroethylvinyl ether	µg/L	1x during first 24 months of permit	Discrete
		term	
Chloroform	µg/L	1x during first 24	Discrete
	-3-	months of permit	Discrete
		term	
Bromodichloromethan	µg/L	1x during first 24	Discrete
е	P3'-	months of permit	Discrete
		term	
1,2-dichlorobenzene	μg/L	1x during first 24	Discrete
1,2 diomoroporizone	µg/L		Discrete
		months of permit term	
1,3-dichlorobenzene	uall	1x during first 24	Discusts
r,s-dicilioropenzene	μg/L		Discrete
		months of permit	
4 4 30 11 1	-	term	
1,4-dichlorobenzene	μg/L	1x during first 24	Discrete
		months of permit	
44 11 17 27		term	1
1,1-dichloroethane	μg/L	1x during first 24	Discrete
		months of permit	
		term	
1,2-dichloroethane	μg/L	1x during first 24	Discrete
		months of permit	
		term	
1,3-dichloropropylene	μg/L	1x during first 24	Discrete
	1.3	months of permit	2.00.0.0
		term	
Ethylbenzene	µg/L	1x during first 24	Discrete
24191001120110	P9'L	months of permit	Discrete
		term	
Bromomethane	μg/L	1x during first 24	Discrete
Bromornario	P9'L	months of permit	Discrete
		term	
Chloromethane	μg/L	1x during first 24	Discrete
Chloromethane	µg/L		Discrete
		months of permit	
Mothylona ablatida	ug/l	term	Disease
Methylene chloride	μg/L	1x during first 24	Discrete
		months of permit	
4.4.0.0		term	
1,1,2,2-	μg/L	1x during first 24	Discrete
tetrachloroethane		months of permit	
		term	
Tetrachloroethylene	μg/L	1x during first 24	Discrete
		months of permit	
		term	
Toluene	µg/L	1x during first 24	Discrete
		months of permit	
		term	
1,2-trans-	μg/L	1x during first 24	Discrete
dichloroethylene	1	months of permit	
•		term	
1,1,1-trichloroethane	μg/L	1x during first 24	Discrete
.,.,	-3	months of permit	Districto
		term	
1,1,2-trichloroethane	μg/L	1x during first 24	Discrete
.,.,	ן רטיב	months of permit	Disciete

Trichloroethylene	μg/L	1x during first 24 months of permit term	Discrete
Vinyl chloride	µg/L	1x during first 24 months of permit term	Discrete
Xylene	µg/L	1x during first 24 months of permit term	Discrete
Semi-VOCs - Acid Ext	ractable		
2-chlorophenol	µg/L	1x during first 24 months of permit term	Discrete
2,4-dichlorophenol	μg/L	1x during first 24 months of permit term	Discrete
2,4-dimethylphenol	μg/L	1x during first 24 months of permit term	Discrete
4,6-dinitro-o-cresol	μg/L	1x during first 24 months of permit term	Discrete
2,4-dinitrophenol	μg/L	1x during first 24 months of permit term	Discrete
2-nitrophenol	μg/L	1x during first 24 months of permit term	Discrete
4-nitrophenol	μg/L	1x during first 24 months of permit term	Discrete
p-chloro-m-cresol	μg/L	1x during first 24 months of permit term	Discrete
Pentachlorophenol	µg/L	1x during first 24 months of permit term	Discrete
Phenol	μg/L	1x during first 24 months of permit term	Discrete
2,4,6-trichlorophenol	μg/L	1x during first 24 months of permit term	Discrete
Semi-VOCs - Base/Ne	eutrals		
Acenaphthene	μg/L	1x during first 24 months of permit term	Discrete
Acenaphthylene	µg/L	1x during first 24 months of permit term	Discrete
Anthracene	μg/L	1x during first 24 months of permit term	Discrete
Benz(a)anthracene	µg/L	1x during first 24 months of permit term	Discrete

Hexachlorocyclopent adiene	μg/L	1x during first 24 months of permit term	Discrete
Hexachlorobutadiene	µg/L	1x during first 24 months of permit term	Discrete
Hexachlorobenzene	µg/L	1x during first 24 months of permit term	Discrete
Fluorene	µg/L	1x during first 24 months of permit term	Discrete
Fluoranthene	μg/L	1x during first 24 months of permit term	Discrete
1,2-diphenylhydrazine (as azobenzene)	μg/L	1x during first 24 months of permit term	Discrete
Di-n-octyl phthalate	μg/L	1x during first 24 months of permit term	Discrete
2,6-dinitrotoluene	µg/L	1x during first 24 months of permit term	Discrete
2,4-dinitrotoluene	µg/L	1x during first 24 months of permit term	Discrete
Di-n-butyl phthalate	µg/L	1x during first 24 months of permit term	Discrete
Dimethyl phthalate	μg/L	1x during first 24 months of permit term	Discrete
Diethyl phthalate	µg/L	1x during first 24 months of permit term	Discrete
3,3'-dichlorobenzidine	μg/L	1x during first 24 months of permit term	Discrete
Dibenzo(a,h)anthrace ne	μg/L	1x during first 24 months of permit term	Discrete
Chrysene	μg/L	1x during first 24 months of permit term	Discrete
Benzo(k)fluoranthene	µg/L	1x during first 24 months of permit term	Discrete
Benzo(g,h,i)perylene	µg/L	1x during first 24 months of permit term	Discrete
Benzo(b)fluoranthene	μg/L	1x during first 24 months of permit term	Discrete
Benzo(a)pyrene	µg/L	1x during first 24 months of permit term	Discrete

Hexachloroethane	μg/L	1x during first 24 months of permit term	Discrete
Indeno(1,2,3- cd)pyrene	µg/L	1x during first 24 months of permit term	Discrete
Isophorone	μg/L	1x during first 24 months of permit term	Discrete
Naphthalene	μg/L	1x during first 24 months of permit term	Discrete
Nitrobenzene	μg/L	1x during first 24 months of permit term	Discrete
N- nitrosodimethylamine	µg/L	1x during first 24 months of permit term	Discrete
N-nitrosodi-n- propylamine	µg/L	1x during first 24 months of permit term	Discrete
N- nitrosodiphenylamine	μg/L	1x during first 24 months of permit term	Discrete
Phenanthrene	μg/L	1x during first 24 months of permit term	Discrete
Pyrene	µg/L	1x during first 24 months of permit term	Discrete
1,2,4- trichlorobenzene	µg/L	1x during first 24 months of permit term	Discrete
PCB / Pesticides			
Aldrin	µg/L	1x during first 24 months of permit term	Discrete
Alpha-BHC	µg/L	1x during first 24 months of permit term	Discrete
Beta-BHC	μg/L	1x during first 24 months of permit term	Discrete
Gamma-BHC	µg/L	1x during first 24 months of permit term	Discrete
Delta-BHC	µg/L	1x during first 24 months of permit term	Discrete
Chlordane	µg/L	1x during first 24 months of permit term	Discrete
4,4'-DDT	µg/L	1x during first 24 months of permit term	Discrete
4,4'-DDE	µg/L	1x during first 24 months of permit term	Discrete

4,4'-DDD	µg/L	1x during first 24 months of permit term	Discrete
Dieldrin	µg/L	1x during first 24 months of permit term	Discrete
Alpha-endosulfan	µg/L	1x during first 24 months of permit term	Discrete
Beta-endosulfan	µg/L	1x during first 24 months of permit term	Discrete
Endosulfan sulfate	μg/L	1x during first 24 months of permit term	Discrete
Endrin	µg/L	1x during first 24 months of permit term	Discrete
Endrin aldehyde	µg/L	1x during first 24 months of permit term	Discrete
Heptachlor	µg/L	1x during first 24 months of permit term	Discrete
Heptachlor epoxide	μg/L	1x during first 24 months of permit term	Discrete
PCB-1242	μg/L	1x during first 24 months of permit term	Discrete
PCB-1254	μg/L	1x during first 24 months of permit term	Discrete
PCB-1221	µg/L	1x during first 24 months of permit term	Discrete
PCB-1232	µg/L	1x during first 24 months of permit term	Discrete
PCB-1248	µg/L	1x during first 24 months of permit term	Discrete
PCB-1260	µg/L	1x during first 24 months of permit term	Discrete
PCB-1016	µg/L	1x during first 24 months of permit term	Discrete
Toxaphene	µg/L	1x during first 24 months of permit term	Discrete



# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



# **AZPDES SMALL MS4 - STORMWATER CHARACTERIZATION DMR**

LTF #: 92548

Report/Form ID #: 93223

**Date Submitted: 09/25/2023** 

#### AZPDES SMALL MS4 STORMWATER CHARACTERIZATION DMR - SUMMARY

**Company:** 

Name: LAKE HAVASU CITY

Question: What is the sample date and lab result received date?

Answer:

Sample Date:

08/19/2023

Lab Result Received Date: 08/21/2023

Question: Did you take samples for field screening points that need to be included in the DMR?

Answer: No

Field Screening Point Name/Number

Latitude

Longitude

**Protected Surface Water Name** 

Question: Identify all your outfalls/field screening points for this DMR.

Answer:

Outfall/Field Screening Point Name/Number	Protected Surface Water Name	Latitude	Longitude	Rainfall Amount (inches)	Land Use
Location 1	Lake Havasu	34.458869	-114.333751	.12	Residential
Location 2	Lake Havasu	34.463463	-114.342216	.12	Industrial
Location 5	Lake Havasu	34.494866	-114.361985	.12	Commercial

Question: Do you need to provide a No Data Indicator (NODI) code for this report at the outfall/field screening point level?

## **Outfall/Field Screening Point Name/Number**

NODI

# Question: How many samples for mandatory parameters have been taken for each outfall/field screening point?

Answer:

Outfall/Field Screening Point Name/Number	Type	Parameter	Number of Samples
Location 1	Outfall	1,1,1-TRICHLORO ETHANE	1
Location 1	Outfall	1,1,2,2-TETRACHLORO ETHANE	1
Location 1	Outfall	1,1,2-TRICHLORO ETHANE	1
Location 1	Outfall	1,1-DICHLORO ETHANE	1
Location 1	Outfall	1,2,4-TRICHLORO BENZENE	1
Location 1	Outfall	1,2- TRANS-DICHLORO-ETHYLENE	1
Location 1	Outfall	1,2-DICHLORO BENZENE	1
Location 1	Outfall	1,2-DICHLOROETHANE	1
Location 1	Outfall	1,2-DIPHENYL HYDRAZINE	1
Location 1	Outfall	1,3-DICHLORO BENZENE	1
Location 1	Outfall	1,3-DICHLOROPROPYLENE	1

Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 1	Outfall	1,4-DICHLORO BENZENE 2	1
Location 1	Outfall	2,4,6-TRICHLORO PHENOL	1
Location 1	Outfall	2,4-DICHLORO PHENOL	1
Location 1	Outfall	2,4-DIMETHYL PHENOL	1
Location 1	Outfall	2,4-DINITRO PHENOL	1
Location 1	Outfall	2,4-DINITRO TOLUENE	1
Location 1	Outfall	2,6-DINITRO TOLUENE	1
Location 1	Outfall	2-CHLORO PHENOL	1
Location 1	Outfall	2-CHLOROETHYLVINYL ETHER	1
Location 1	Outfall	2-METHYL-4,6-DINITRO PHENOL 2	1
Location 1	Outfall	2-NITRO PHENOL	1
Location 1	Outfall	3,3-DICHLORO BENZIDINE	1
Location 1	Outfall	4,4- DDD	1
Location 1	Outfall	4,4- DDE	1
Location 1	Outfall	4,4- DDT	1
Location 1	Outfall	4-CHLORO-3-METHYL PHENOL	1

Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 1	Outfall	4-NITRO PHENOL	1
Location 1	Outfall	ACENAPHTHENE	1
Location 1	Outfall	ACENAPHTHYLENE	1
Location 1	Outfall	ACROLEIN	1
Location 1	Outfall	ACRYLONITRILE	1
Location 1	Outfall	ALDRIN	1
Location 1	Outfall	ALPHA- BHC	1
Location 1	Outfall	ANTHRACENE	1
Location 1	Outfall	BENZENE	1
Location 1	Outfall	BENZO(A) ANTHRACENE	1
Location 1	Outfall	BENZO(A) PYRENE	1
Location 1	Outfall	BENZO(B) FLUORANTHENE	1
Location 1	Outfall	BENZO(GHI) PERYLENE	1
Location 1	Outfall	BENZO(K) FLUORANTHENE	1
Location 1	Outfall	BETA- BHC	1
Location 1	Outfall	BHC-DELTA	1

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Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 1	Outfall	CARBON TETRACHLORIDE	1
Location 1	Outfall	CHLORDANE	1
Location 1	Outfall	CHLORO BENZENE	1
Location 1	Outfall	CHLOROETHANE	1
Location 1	Outfall	CHLOROFORM	1
Location 1	Outfall	CHRYSENE	1
Location 1	Outfall	DI-N-BUTYL PHTHALATE	1
Location 1	Outfall	DI-N-OCTYL PHTHALATE	1
Location 1	Outfall	DIBENZO(A,H) ANTHRACENE	1
Location 1	Outfall	DIBROMOCHLORO METHANE	1
Location 1	Outfall	DICHLOROBROMO METHANE 1	1
Location 1	Outfall	DIELDRIN	1
Location 1	Outfall	DIETHYL PHTHALATE	1
Location 1	Outfall	DIMETHYL PHTHALATE	1
Location 1	Outfall	ENDOSULFAN I	1
Location 1	Outfall	ENDOSULFAN II	1

Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 1	Outfall	ENDOSULFAN SULFATE	1
Location 1	Outfall	ENDRIN	1
Location 1	Outfall	ENDRINE ALDEHYDE	1
Location 1	Outfall	ETHYL BENZENE	1
Location 1	Outfall	FLUORANTHENE	1
Location 1	Outfall	FLUORENE	1
Location 1	Outfall	GAMMA- BHC (LINDANE)	1
Location 1	Outfall	HEPTACHLOR	1
Location 1	Outfall	HEPTACHLOR EPOXIDE	1
Location 1	Outfall	HEXACHLORO BENZENE	1
Location 1	Outfall	HEXACHLORO BUTADIENE	1
Location 1	Outfall	HEXACHLORO ETHANE	1
Location 1	Outfall	HEXACHLOROCYCLOPENTADIENE (UG/L)	1,
Location 1	Outfall	INDENO(1,2,3-CD) PYRENE	1
Location 1	Outfall	ISOPHORONE	1
Location 1	Outfall	METHYL BROMIDE	1

Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 1	Outfall	METHYL CHLORIDE	1
Location 1	Outfall	METHYLENE CHLORIDE 1	1
Location 1	Outfall	N-NITROSO DIMETHYL AMINE	1
Location 1	Outfall	N-NITROSODI-N-PROPYLAMINE	1
Location 1	Outfall	N-NITROSODIPHENYL AMINE	1
Location 1	Outfall	NAPHTHALENE	1
Location 1	Outfall	NITRO BENZENE	Î
Location 1	Outfall	PCB-1016	1
Location 1	Outfall	PCB-1221	1
Location 1	Outfall	PCB-1232	1
Location 1	Outfall	PCB-1242	1
Location 1	Outfall	PCB-1248	1
Location 1	Outfall	PCB-1254	1
Location 1	Outfall	PCB-1260	1
Location 1	Outfall	PENTACHLOROPHENOL	1
Location 1	Outfall	PHENANTHRENE	1

Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 1	Outfall	PHENOL	1
Location 1	Outfall	TETRACHLOROETHYLENE	1
Location 1	Outfall	TOLUENE	1
Location 1	Outfall	TOTAL CYANIDE	1
Location 1	Outfall	TOTAL RECOVERABLE ANTIMONY	1
Location 1	Outfall	TOTAL RECOVERABLE BARIUM	1
Location 1	Outfall	TOTAL RECOVERABLE BERYLLIUM	1
Location 1	Outfall	TOTAL RECOVERABLE CADMIUM	1
Location 1	Outfall	TOTAL RECOVERABLE MERCURY	1
Location 1	Outfall	TOTAL RECOVERABLE NICKEL	1
Location 1	Outfall	TOTAL RECOVERABLE SILVER	1
Location 1	Outfall	TOTAL RECOVERABLE THALLIUM	1
Location 1	Outfall	TOTAL XYLENE	1
Location 1	Outfall	TOXAPHENE	1
Location 1	Outfall	TRICHLORO ETHYLENE	1
Location 1	Outfall	VINYL CHLORIDE	1

Outfall/Field Screening Point Name/Number	Туре	Parameter Parameter	Number of Samples
Location 2	Outfall	1,1,1-TRICHLORO ETHANE	1
Location 2	Outfall	1,1,2,2-TETRACHLORO ETHANE	1
Location 2	Outfall	1,1,2-TRICHLORO ETHANE	1
Location 2	Outfall	1,1-DICHLORO ETHANE	1
Location 2	Outfall	1,2,4-TRICHLORO BENZENE	1
Location 2	Outfall	1,2- TRANS-DICHLORO-ETHYLENE	1
Location 2	Outfall	1,2-DICHLORO BENZENE	1
Location 2	Outfall	1,2-DICHLOROETHANE	1
Location 2	Outfall	1,2-DIPHENYL HYDRAZINE	1
Location 2	Outfall	1,3-DICHLORO BENZENE	1
Location 2	Outfall	1,3-DICHLOROPROPYLENE	1
Location 2	Outfall	1,4-DICHLORO BENZENE 2	1
Location 2	Outfall	2,4,6-TRICHLORO PHENOL	1
Location 2	Outfall	2,4-DICHLORO PHENOL	1
Location 2	Outfall	2,4-DIMETHYL PHENOL	1
Location 2	Outfall	2,4-DINITRO PHENOL	1

Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 2	Outfall	2,4-DINITRO TOLUENE	1
Location 2	Outfall	2,6-DINITRO TOLUENE	1
Location 2	Outfall	2-CHLORO PHENOL	1
Location 2	Outfall	2-CHLOROETHYLVINYL ETHER	1
Location 2	Outfall	2-METHYL-4,6-DINITRO PHENOL 2	1
Location 2	Outfall	2-NITRO PHENOL	1
Location 2	Outfall	3,3-DICHLORO BENZIDINE	1
Location 2	Outfall	4,4- DDD	1
Location 2	Outfall	4,4- DDE	1
Location 2	Outfall	4,4- DDT	1
Location 2	Outfall	4-CHLORO-3-METHYL PHENOL	1
Location 2	Outfall	4-NITRO PHENOL	1
Location 2	Outfall	ACENAPHTHENE	1
Location 2	Outfall	ACENAPHTHYLENE	1
Location 2	Outfall	ACROLEIN	1
Location 2	Outfall	ACRYLONITRILE	1

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Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 2	Outfall	ALDRIN	1
Location 2	Outfall	ALPHA- BHC	1
Location 2	Outfall	ANTHRACENE	1
Location 2	Outfall	BENZENE	1
Location 2	Outfall	BENZO(A) ANTHRACENE	1
Location 2	Outfall	BENZO(A) PYRENE	1
Location 2	Outfall	BENZO(B) FLUORANTHENE	1
Location 2	Outfall	BENZO(GHI) PERYLENE	1
Location 2	Outfall	BENZO(K) FLUORANTHENE	1
Location 2	Outfall	BETA- BHC	1
Location 2	Outfall	BHC-DELTA	1
Location 2	Outfall	CARBON TETRACHLORIDE	1
Location 2	Outfall	CHLORDANE	1
Location 2	Outfall	CHLORO BENZENE	1
Location 2	Outfall	CHLOROETHANE	1
Location 2	Outfall	CHLOROFORM	1

Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 2	Outfall	CHRYSENE	1
Location 2	Outfall	DI-N-BUTYL PHTHALATE	1
Location 2	Outfall	DI-N-OCTYL PHTHALATE	1
Location 2	Outfall	DIBENZO(A,H) ANTHRACENE	1
Location 2	Outfall	DIBROMOCHLORO METHANE	1
Location 2	Outfall	DICHLOROBROMO METHANE 1	1
Location 2	Outfall	DIELDRIN	1
Location 2	Outfall	DIETHYL PHTHALATE	1
Location 2	Outfall	DIMETHYL PHTHALATE	1
Location 2	Outfall	ENDOSULFAN I	1
Location 2	Outfall	ENDOSULFAN II	1
Location 2	Outfall	ENDOSULFAN SULFATE	1
Location 2	Outfall	ENDRIN	1
Location 2	Outfall	ENDRINE ALDEHYDE	1
Location 2	Outfall	ETHYL BENZENE	1
Location 2	Outfall	FLUORANTHENE	1

Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 2	Outfall	FLUORENE	1
Location 2	Outfall	GAMMA- BHC (LINDANE)	1
Location 2	Outfall	HEPTACHLOR	1
Location 2	Outfall	HEPTACHLOR EPOXIDE	1
Location 2	Outfall	HEXACHLORO BENZENE	1
Location 2	Outfall	HEXACHLORO BUTADIENE	1
Location 2	Outfall	HEXACHLORO ETHANE	1
Location 2	Outfall	HEXACHLOROCYCLOPENTADIENE (UG/L)	1
Location 2	Outfall	INDENO(1,2,3-CD) PYRENE	1
Location 2	Outfall	ISOPHORONE	1
Location 2	Outfall	METHYL BROMIDE	1
Location 2	Outfall	METHYL CHLORIDE	1
Location 2	Outfall	METHYLENE CHLORIDE 1	1
Location 2	Outfall	N-NITROSO DIMETHYL AMINE	Ĩ
Location 2	Outfall	N-NITROSODI-N-PROPYLAMINE	1
Location 2	Outfall	N-NITROSODIPHENYL AMINE	1

Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 2	Outfall	NAPHTHALENE	1
Location 2	Outfall	NITRO BENZENE	1
Location 2	Outfall	PCB-1016	1
Location 2	Outfall	PCB-1221	1
Location 2	Outfall	PCB-1232	1
Location 2	Outfall	PCB-1242	1
Location 2	Outfall	PCB-1248	1
Location 2	Outfall	PCB-1254	1
Location 2	Outfall	PCB-1260	1
Location 2	Outfall	PENTACHLOROPHENOL	1
Location 2	Outfall	PHENANTHRENE	1
Location 2	Outfall	PHENOL	1
Location 2	Outfall	TETRACHLOROETHYLENE	1
Location 2	Outfall	TOLUENE	1
Location 2	Outfall	TOTAL CYANIDE	1
Location 2	Outfall	TOTAL RECOVERABLE ANTIMONY	1

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Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 2	Outfall	TOTAL RECOVERABLE BARIUM	1
Location 2	Outfall	TOTAL RECOVERABLE BERYLLIUM	1
Location 2	Outfall	TOTAL RECOVERABLE CADMIUM	1
Location 2	Outfall	TOTAL RECOVERABLE MERCURY	1
Location 2	Outfall	TOTAL RECOVERABLE NICKEL	1
Location 2	Outfall	TOTAL RECOVERABLE SILVER	1
Location 2	Outfall	TOTAL RECOVERABLE THALLIUM	1
Location 2	Outfall	TOTAL XYLENE	1
Location 2	Outfall	TOXAPHENE	1
Location 2	Outfall	TRICHLORO ETHYLENE	1
Location 2	Outfall	VINYL CHLORIDE	1
Location 5	Outfall	1,1,1-TRICHLORO ETHANE	1
Location 5	Outfall	1,1,2,2-TETRACHLORO ETHANE	1
Location 5	Outfall	1,1,2-TRICHLORO ETHANE	1
Location 5	Outfall	1,1-DICHLORO ETHANE	1
Location 5	Outfall	1,2,4-TRICHLORO BENZENE	1

Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 5	Outfall	1,2- TRANS-DICHLORO-ETHYLENE	1
Location 5	Outfall	1,2-DICHLORO BENZENE	1
Location 5	Outfall	1,2-DICHLOROETHANE	1
Location 5	Outfall	1,2-DIPHENYL HYDRAZINE	1
Location 5	Outfall	1,3-DICHLORO BENZENE	1
Location 5	Outfall	1,3-DICHLOROPROPYLENE	1
Location 5	Outfall	1,4-DICHLORO BENZENE 2	1
Location 5	Outfall	2,4,6-TRICHLORO PHENOL	1
Location 5	Outfall	2,4-DICHLORO PHENOL	1
Location 5	Outfall	2,4-DIMETHYL PHENOL	1
Location 5	Outfall	2,4-DINITRO PHENOL	1
Location 5	Outfall	2,4-DINITRO TOLUENE	1
Location 5	Outfall	2,6-DINITRO TOLUENE	1
Location 5	Outfall	2-CHLORO PHENOL	1
Location 5	Outfall	2-CHLOROETHYLVINYL ETHER	1
Location 5	Outfall	2-METHYL-4,6-DINITRO PHENOL 2	1

Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 5	Outfall	2-NITRO PHENOL	1
Location 5	Outfall	3,3-DICHLORO BENZIDINE	ā
Location 5	Outfall	4,4- DDD	1
Location 5	Outfall	4,4- DDE	1
Location 5	Outfall	4,4- DDT	1
Location 5	Outfall	4-CHLORO-3-METHYL PHENOL	1
Location 5	Outfall	4-NITRO PHENOL	1
Location 5	Outfall	ACENAPHTHENE	1
Location 5	Outfall	ACENAPHTHYLENE	1
Location 5	Outfall	ACROLEIN	1
Location 5	Outfall	ACRYLONITRILE	1
Location 5	Outfall	ALDRIN	1
Location 5	Outfall	ALPHA- BHC	1
Location 5	Outfall	ANTHRACENE	1
Location 5	Outfall	BENZENE	1
Location 5	Outfall	BENZO(A) ANTHRACENE	1

Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 5	Outfall	BENZO(A) PYRENE	1
Location 5	Outfall	BENZO(B) FLUORANTHENE	1
Location 5	Outfall	BENZO(GHI) PERYLENE	1
Location 5	Outfall	BENZO(K) FLUORANTHENE	1
Location 5	Outfall	BETA- BHC	1
Location 5	Outfall	BHC-DELTA	1
Location 5	Outfall	CARBON TETRACHLORIDE	1
Location 5	Outfall	CHLORDANE	1
Location 5	Outfall	CHLORO BENZENE	1
Location 5	Outfall	CHLOROETHANE	1
Location 5	Outfall	CHLOROFORM	1
Location 5	Outfall	CHRYSENE	1
Location 5	Outfall	DI-N-BUTYL PHTHALATE	1
Location 5	Outfall	DI-N-OCTYL PHTHALATE	1
Location 5	Outfall	DIBENZO(A,H) ANTHRACENE	1
Location 5	Outfall	DIBROMOCHLORO METHANE	1

Outfall/Field Screening Point Name/Number	Type	Parameter	Number of Samples
Location 5	Outfall	DICHLOROBROMO METHANE 1	1
Location 5	Outfall	DIELDRIN	1
Location 5	Outfall	DIETHYL PHTHALATE	1
Location 5	Outfall	DIMETHYL PHTHALATE	1
Location 5	Outfall	ENDOSULFAN I	1
Location 5	Outfall	ENDOSULFAN II	Ĩ
Location 5	Outfall	ENDOSULFAN SULFATE	1
Location 5	Outfall	ENDRIN	1
Location 5	Outfall	ENDRINE ALDEHYDE	1
Location 5	Outfall	ETHYL BENZENE	1
Location 5	Outfall	FLUORANTHENE	1
Location 5	Outfall	FLUORENE	1
Location 5	Outfall	GAMMA- BHC (LINDANE)	1
Location 5	Outfall	HEPTACHLOR	1
Location 5	Outfall	HEPTACHLOR EPOXIDE	1
Location 5	Outfall	HEXACHLORO BENZENE	1

Name/Number	Туре	Parameter	Number of Samples
Location 5	Outfall	HEXACHLORO BUTADIENE	1
Location 5	Outfall	HEXACHLORO ETHANE	1
Location 5	Outfall	HEXACHLOROCYCLOPENTADIENE (UG/L)	1
Location 5	Outfall	INDENO(1,2,3-CD) PYRENE	1
Location 5	Outfall	ISOPHORONE	1
Location 5	Outfall	METHYL BROMIDE	1
Location 5	Outfall	METHYL CHLORIDE	1
Location 5	Outfall	METHYLENE CHLORIDE 1	1
Location 5	Outfall	N-NITROSO DIMETHYL AMINE	1
Location 5	Outfall	N-NITROSODI-N-PROPYLAMINE	1
Location 5	Outfall	N-NITROSODIPHENYL AMINE	1
Location 5	Outfall	NAPHTHALENE	1
Location 5	Outfall	NITRO BENZENE	1
Location 5	Outfall	PCB-1016	1
Location 5	Outfall	PCB-1221	1
Location 5	Outfall	PCB-1232	1

Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 5	Outfall	PCB-1242	1
Location 5	Outfall	PCB-1248	1
Location 5	Outfall	PCB-1254	1
Location 5	Outfall	PCB-1260	1
Location 5	Outfall	PENTACHLOROPHENOL	1
Location 5	Outfall	PHENANTHRENE	1
Location 5	Outfall	PHENOL	1
Location 5	Outfall	TETRACHLOROETHYLENE	1
Location 5	Outfall	TOLUENE	1
Location 5	Outfall	TOTAL CYANIDE	1
Location 5	Outfall	TOTAL RECOVERABLE ANTIMONY	1
Location 5	Outfall	TOTAL RECOVERABLE BARIUM	1
Location 5	Outfall	TOTAL RECOVERABLE BERYLLIUM	1
Location 5	Outfall	TOTAL RECOVERABLE CADMIUM	1
Location 5	Outfall	TOTAL RECOVERABLE MERCURY	1
Location 5	Outfall	TOTAL RECOVERABLE NICKEL	1

(602)771-2300

Outfall/Field Screening Point Name/Number	Туре	Parameter	Number of Samples
Location 5	Outfall	TOTAL RECOVERABLE SILVER	1
Location 5	Outfall	TOTAL RECOVERABLE THALLIUM	1
Location 5	Outfall	TOTAL XYLENE	1
Location 5	Outfall	TOXAPHENE	1
Location 5	Outfall	TRICHLORO ETHYLENE	1
Location 5	Outfall	VINYL CHLORIDE	1

Question: Did you take samples for any additional parameters that need to be included in the DMR?

Answer: No

**Question: Upload completed Excel spreadsheet.** 

Answer:

File Name: char\_dmr\_92548\_93223.xlsx

Question: Your DMR has been checked for potential deficiencies.

Answer: No Potential Deficiencies Detected

#### **CERTIFICATION OF SUBMISSION**

#### **SHAWN M CLARKE**

You validated your identity by answering your personal security question and password on myDEQ at **01:37 PM** on **09/25/2023**. At this time, you certified the summary information above by checking that you agreed to the following statement:

#### **Certify your submission:**

By checking this box I certify under penalty of law that this submittal was prepared by me, or under my direction or supervision of personnel appropriately qualified to properly gather and evaluate the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I understand that all information submitted to ADEQ is public record unless otherwise identified by law as confidential. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

# Appendix E - Discharge Monitoring Reports

# **Sampling and Analysis Plan**

#### for:

Daytona, Pima, Willow, El Dorado, Industrial, Kiowa, Havasupai, Neptune, Felicidad Wash For MS4 Outfall Monitoring and Analysis of Stormwater

928-855-3377

Contact(s):

Mike Wolfe
Lake Havasu City Engineering Department
900 London Bridge Road
928-855-3377
Engineeringinfo@lhcaz.gov

# **SAP Preparation Date:**

2/13/2025

### **Contents**

#### Instructions:

 Right click on Table of Contents and select 'Update Field' → 'Update page numbers only' to update page numbers once the SAP template has been completed with the construction site's specific information.

1.0 SAMP	LING AND ANALYSIS PLAN	1
1.1	Sampling and Analysis Plan Objectives	1
1.2	Recordkeeping Requirements	1
1.3	Sampling Personnel	1
1.4	Sampling Requirements	2
1.5	Analytical Methods and Laboratories	4
1.6	Laboratory Information	4
1.7	Sampling Procedures	5

#### 1.0 SAMPLING AND ANALYSIS PLAN

This Sampling and Analysis Plan is intended to provide all details required by the MS4 Permit. It shall be completed,

#### 1.1 Sampling and Analysis Plan Objectives

#### Instructions:

Fill in the blanks as appropriate.

There are multiple objectives for this plan:

- Establish sampling protocols and methods for stormwater monitoring and sampling, as required under the;
- Provide sampling locations for 9 Wash Locations, which are identified as Daytona, Pima, Willow, El Dorado, Industirla, Kiowa, and Havasupai, Neptune & Felicidad Wash and are intended to monitor stormwater quality for discharges into Lake Havasu.
- Document sampling and analysis methods and equipment for collecting representative samples of stormwater that maximize resources.

#### 1.2 Recordkeeping Requirements

Records of monitoring information must include the results of each stormwater monitoring event (Sample Collection Form) and laboratory analyses, including all field calibration and maintenance records.

Monitoring data must be submitted on an electronic Discharge Monitoring Report (eDMR) via a myDEQ account as prescribed in the 2020 CGP, Part 7.5(3)(d). Copies of the analytical test results will be maintained with the construction site records.

#### 1.3 Sampling Personnel

#### instructions:

 Complete Table 1 by listing the personnel responsible for collecting, packing and shipping/delivering samples.

#### Table 1 - Sampling Personnel

Staff Names	Specific Responsibilities
James Holland	Water Sampler, Chain of Custody Documentation, send to Legends
Greg Hanson/Matt Thomas/Shawn Clarke	Additional Samplers and Outfall Inspectors as needed

#### 1.4 Sampling Requirements

#### Instructions:

- Check boxes to indicate all monitoring required at construction site
- Complete Table 2 (a,b,etc...) with information related to Outfall(s), SWQS or TMDL/ WLA
- Complete Table 3 with information related to monitoring parameters
- Copy and paste the table for each outfall as necessary
- Complete Table 4 with information related to Additional Monitoring Required by ADEQ

Check each type of monitoring required or exceptions taken based on activity, receiving water(s), or additional monitoring by ADEQ:

Construction site is/has been maintained as Inactive/Unstaffed (documented in SWPPP)

Impaired Waters Monitoring without a TMDL

Impaired Waters Monitoring with a TMDL for Selenium Impairment

Stormwater

Completed in 2023

Additional Monitoring Required by ADEQ (maintain official correspondence with SWPPP)

Description of Outfall(s)

A copy of the approved myDEQ Notice of Intent (NOI) Certificate has been included which incorporates by reference the specific monitoring requirements determined by receiving water(s) (Impaired/TMDL, OAW), and additional monitoring required by ADEQ. The attached NOI certificate serves as a summary of monitoring requirements at each outfall (Table 2).

Daytona Wash OF-1 (Use one table below for each outfall. Copy and paste the table as necessary).

#### & All Other 8 Outfalls As required

Table 2 - Summary of Outfalls

Outfall Name	Parameter	SWQS, TMDL/ WLA	Frequency
Daytona Wash - OF-1	Selenium	.002 mg/L	Summer Wet/Winter Wet
Pima Wash - OF-2	Selenium	.002 mg/L	Summer Wet/Wiinter Wet
Willow Wash - OF-3	Selenium	.002 mg/L	Summer Wet/Winter Wet
El Dorado Wash - OF-4	Selenium	.002 mg/LL	Summer Wet/Winter Wet
Industrial Drain -OF-5	Selenium	.002 mg/L	Summer Wet/Winter Wet
Kiowa Drain - OF-6	Selenium	.002 mg/L	Summer Wet/Winter Wet
Havasupai Wash - OF-7	Selenium	.002 mg/L	Summer Wet/Winter Wet

Neptune Wash - OF8	Selenium	.002 mg/L	Summer Wet/Winter Wet
Felicidad Drain - OF-9	Selenium	.002 mg/L	Summer Wet/Winter Wet

#### **Water Quality Monitoring Parameters**

Complete Table 3 with the sampling requirements for each analyte.

Table 3 - Sample Requirements

Parameter	Analytical Method	Target RL	Volume of Sample Container	Type of Preservative	Type of Bottle	Holding Time
ADEQ APPENDIX B	ADEQ Appendix B	ADEQ APPENDIX B	Kit Provided by Legends	Kit Provided by Legend	Kit Provided by Legends	24 Hours Max
=						

#### **Quality Assurance/Quality Control Procedures**

Indicate in Table 4 when and how any of the following Quality Assurance/Quality Control (QA/QC) samples will be used:

Table 4 - Quality Control Procedures

QC Method	Frequency	Specific Use
Field Blank	Summer Wet/Winter Wet Season	Additonal Samples if necessary
Trip Blank	Summe Wet/Winter Wet	Water Sample filled with deionied water to lab
Split/Duplicate Samples	As Needed	As needed
Matrix Spikes	Stormwater Characterization	Antimony, Cadium, Selenium, Silver & thalium as provided in Legend test kit
Background Samples		
Temperature Blanks	N/A	N/A
Rinsate Sample		policies and procedures in visually inspecting outfalls

#### Additional Monitoring Parameters Required by ADEQ

(Delete paragraph and Table if not applicable) In addition to the parameters listed in Table 1, ADEQ has specifically requested monitoring for the following additional analytes (Table 5):

Table 5 - Summary of Additional Monitoring Required by ADEQ

Outfall/ Receiving Water	Parameter	SWQS, TMDL/ WLA	Frequency
OF1 -DAYTONA WASH (RESIDENTIAL)	ADEQ APPENDIX B	ADEQ APPENDIX B	ANNUALY PER STORMWATER CHARACTERIZATIO
OF-5 INDUSTRIAL DRAIN (INDUSTRIAL)	ADEQ APPENDIX B	ADEQ APPENDIX B	ANNUALY PER STORMWATER CHARACTERIZATION

OF -2 SEE SWMP Appendix SEE SWMP Appendix PIMA/QUEENSBAY(COMMERCIAL) D SEE SWMP APPENDIX D] PER STORMWATER CHARACTERIZATION3

#### 1.5 Analytical Methods and Laboratories

#### Instructions:

- Information and procedures related to determining Hardness
- Procedure for comparing monitoring results to WLA in TMDL

Other than parameters required to be sampled at the time of sample collection (e.g. field parameters), all samples shall be analyzed by a laboratory that is licensed by the Arizona Department of Health Service (ADHS) Office of Laboratory Licensure and Certification. Identification of the analytical methods and related limits of detection (if applicable) for each parameter is required.

All laboratory analyses shall be conducted according to test procedures specified in 40 CFR 136, unless other test procedures have been specified in this general permit. This requirement does not apply to parameters that require analysis at the time of sample collection as long as the testing methods used are approved by ADHS. The permittee may conduct field analysis of turbidity if the permittee has sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to properly perform the field analysis.

NOTE: Reporting limits and sample results should be reported to the number of significant figures available or required on the eDMR generated by myDEQ.

#### **Hardness**

If hardness characterization of the receiving water included analysis of samples from the **surface water receiving the discharge** or **surface water data collected by a third party** (provided the data is credible, scientifically defensible and is representative of current conditions), the data and the methodology for determining the hardness values must be **submitted to ADEQ in the myDEQ eDMR** to allow ADEQ to compare monitoring results with applicable SWQS. The permittee shall retain all reports and monitoring data in accordance with Part 8.1(2) of the permit.

#### **Total Maximum Dally Load**

(Delete paragraph if not applicable) If applicable to 9 Outfall Locations, once the analytical results have been received, they will be compared to the applicable WLAs in the approved TMDL. Include a copy of each TMDL applicable to the construction site's stormwater discharges. Approved (and draft) TMDLs can be found here: <a href="https://www.azdeq.gov">www.azdeq.gov</a>, search for "TMDL."

### 1.6 Laboratory Information

#### Instructions:

Complete the Table with information for the laboratory that will be used by the construction site to analyze

Eurofins Table 4-	Table 4 - Laboratory Information		
Legend Technical Serives of Arizona	POC: Barbara Frank		
602-324-6180 (602) 659 - 7629	phoenix@legendanalytical.com		
17631 N. 25th Ave Phoenix Az 85023 4623	5 East cotton center Blud, Suite#189		
Phoenix, Arizona, 85023 85040  K Nater lab changed Sag			

### 1.7 Sampling Procedures

#### Instructions:

 Include procedures for the sample collection process: from sample collection to getting the samples to the lab

### **Event Planning and Preparation**

Daytona Wash (OF-1)

Some required sampling materials include (check those that apply, add Items as necessary):

☑ Sample Collection Form(s) for each outfall	Sample containers for each outfall
⊠ Cooler(s)	☑ A temperature blank for each cooler
□ Chain-of-Custody (COC) forms and seals	$\ensuremath{\boxtimes}$ Field preservation supplies (ice, lab-supplied chemicals).
□ N/A	□ N/A

#### **Access**

Access to the stormwater sampling location(s) is Wash Crossing at London Bridge Road or WOTUS (e.g. accessible, restricted, 4x4 vehicle, requires a key, etc.).

### Calibration and Maintenance of Monitoring Equipment and Instrumentation

All monitoring instruments and equipment (including the field instruments for measuring pH and turbidity) shall be calibrated and maintained in accordance with the manufacturer's recommendations. Calibration procedures are as follows: Per Manufacturer Instructions

Calibration of the instruments will occur (enter a specific time prior to sample collection) See Attached Documents.

The preferred manufacturer(s) and instrument(s) for the collection of field parameters (pH, temperature, turbidity, and specific conductance) is/are:

- Oakton PH Tester
- Hatch DR300 Pocket Colorimeter

### Monitoring Equipment and Instrumentation

List equipment and instrumentation and describe the procedures for collecting data from them.

- See Attached Manuals for Oakton PH Meter
- See Attached Hatch Dr300 Manual

#### **Field Documentation**

The following information will be recorded on an inspection form, on a sampling form (template Sample Collection form included, one form for each outfall's sampling event), or policies and procedure for visual outfall inspections during collection of samples:

- Names of personnel participating in event
- Description of weather conditions
- Estimated duration (in hours) of the rainfall event
- Estimated rainfall total (in inches) for that rainfall event and source
- Date of the previous measurable storm event
- Sample location and description (outfall or other)
- Date and time of sample collection
- Type of sample (grab, discrete, manual, auto sampler)
- Observations of sampling procedures and conditions at the time of sampling
- Field observations and description of problems

- Field instrument calibration information
- Field parameter measurements (see partial list below)
- Estimated rainfall/storm duration
- (optional) Stream flow
- Field filtration methods used

encountered or changes made from the plan

- Sample identification name
- Field observations relevant to sample integrity
- Rainfall measurement in inches
- QC samples and sample names if taken for the event

(Delete paragraph and table if not applicable) The following field parameters will be measured and recorded at the time of sample collection (Check all that apply, Add/Delete field parameters/data as required):

☐ Electrical Conductivity

⊠ pH

### Sample Container Labeling

Each sample should be assigned a unique identifier by the sampling team. The unique identifier may consist of the sample location name (e.g. Outfall #1 or Outfall #2) followed by a date suffix such as YYMMDD. The unique identifier will be recorded on the COC form and the sample container. Provide the unique identifier *format* here: OF1, OF-2, OF-3, OF-5, OF-6, OF-7, OF-8,OF-9.

Each container in the sample must be labeled with the unique identifier as well as the following minimum information:

- Sampler initials
- Sample collection date
- Sample collection time

The laboratory will provide labels to be placed on each of the sample containers. The laboratory may affix the labels in advance. Self-adhesive labels will be secured to each sample container. Samples should be immediately placed on ice for transport to the designated lab. Note: blue ice or similar cooling methods are prohibited.

### Sample Container Preservation

Procedures necessary to properly preserve samples will be provided by the laboratory contracted to perform sample analysis. Include the procedures here: OF- 1, OF-2, OF-3, OF-4, OF-5, OF-6, OF-7, OF-8, OF-9.

**NOTE**: There are techniques that can be used if a longer hold time is necessary than the 24 hours unpreserved samples permit. An option would be to acquire laboratory-supplied bottles with preservatives to use in the field. For total metals, samples can be placed directly in sample bottles with preservatives (HNO<sub>3</sub>) and hold time is increased to 6 months. Dissolved metals must be field filtered before being placed in bottles containing preservatives in order to increase hold time to 6 months. Extending hold times can be helpful when you cannot deliver the samples to the laboratory within 24 hours. In addition to preservatives, samples are placed on ice and maintained at a temperature of four degrees Celsius.

#### Sample Preparation and Transport

Specific procedures and instruction for proper sample cooler packing and transport are critical in maintaining sample integrity. The following section contains guidelines for sample packaging and transport.

The following procedures will be used when preparing the sample cooler(s) for shipment or delivery to the laboratory:

- All labels remaining on the exterior of the cooler will be removed
- A temperature blank will be placed in the cooler (if provided or available)
- Sample bottles will be packaged per manufacturer and lab instructions to prevent breakage during shipment;
- All ice will be bagged in zip-locked plastic bags (confirm with specific lab)



				Construction Site San	nple Informa	tion				
Construction site Name:	Dayton	a Wash			MS4 Permit #	ŧ	AZG 202	21-002		
Outfall Name: O	F -1		"R	epresentative Outfall"?	✓ Yes □	No	**			
Person(s)/Title(s	s) collec	cting sa	mple: Shawn M. Cl	arke						
Person(s)/Title(s	) assis	ting with	sample: Matt Tho	mas						
Date & Time Dis 12/13/25 tlme 2		Began:		Date Sample Collecter 2/13/25	d:		Time 2:34p	Sample Collected: m		
Unique Sample Identifier (Matches Identifier on COC)  OF-1										
Substitute Samp	le? [	□ No 🛭	Yes (identify qua	rter/year when sample	was originally	schedule	d to be col	lected):		
Nature of Discha			II ☐ Snowmelt							
Rainfall Amount:	0.1 inc	hes								
				Field Samplin	ng Data					
Type of Sample		Grab 🗆	Discrete   Manu	ual □ Auto sampler (D	Date/Time Col	lected)				
Field Parameter Measurements	pH: 7	'.10	Temperature: N/A	Conductivity: N/	A	Turbidity:	N/A	Flow Rate: 0 01		
Field Filtration Methods	N	/A								
QC Samples	1 san	nple for	selenium only							
Field Instrument Calibration Data	Calil	brated b	y James Holland							
Indicators of Stor Pollution Observe		<b>'</b> _	No 🛛 Yes (Descri	be): Oil/Sheen Presecr	nce					
Observations of improvements. S	samp ample 1	ling pro Was Ta	ocedures and con- ken from a pond af	ditions at the time of ster the rainfall	sampling: So	me sedim	ent has di	scharged in to new wash		
Description of problems encountered or deviations made from the Plan: The rain at this time had stoped so we could only get one sample from a pond in the road at Snead  * See out fall inspections *										
Certification Statement (Refer to CGP Appendix B, Paragraph 9, for Signatory Requirements)										
'I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."										
A. Name: Shawn M. Clarke B. Title: Civil Engineer										
C. Signature:	8	Un	-6		D. Da	le Signed:	12/13/25			

When placing the samples in the cooler, ensure that the COC form is in a sealed watertight bag taped to the inside of the lid. Sample coolers will be transported to the certified laboratory Ledgend Technical Services (e.g. by the sampler or via courier).

### Relinquishment

The assigned Stormwater Team Member James Holland will sign over the COC form to the receiving entity (e.g. laboratory personnel or courier) James Holland, and the COC form will be signed and dated with the time of relinquishment.

Once the cooler(s) is/are delivered to the laboratory, the cooler's contents will be checked against information on the COC form. The condition, temperature, and appropriate preservation of samples will be checked and documented on the COC form by the lab. Any discrepancies between the COC and the sample conditions at the time of delivery to the laboratory will be communicated to the Stormwater Team Manager for proper resolution and documented in laboratory records.

#### Receipt and Review of Lab Results

The lab's results report will generally be delivered to the Construction site's assigned POC who will either disseminate or evaluate the results report. Following evaluation of the results report, refer to the SWPPP for the appropriate response or follow-up action.



Construction Site Sample Information										
Construction site Name:	ima Wash OF	-2		MS4 Pen	mit#.		AZG 202	1-002		
Outfall Name: OF	-2	"Repre	sentative Outfall"?	? ⊠ Yes	i □ No					
Person(s)/Title(s) collecting sample: Shawn M. Clarke										
Person(s)/Title(s)	assisting with	sample: Matt Thomas								
Date & Time Disc 12/13/25 - 2:15pr			e Sample Collecte 3/25	d:			Time : Enter	Sample Collected: time		
Unique Sample Identifier (Matches Identifier on COC) OF-2 A & OF-2 B										
Substitute Sample	e? ⊠ No □	] Yes								
Nature of Dischar	<u> </u>	II Snowmelt								
Rainfall Amount: .	10									
			Fleld Samplin	ng Data						
Type of Sample	☐ Grab ☐	Discrete Manual	☐ Auto sampler (2	2:19pm 12	2/13/25)					
Field Parameter Measurements	pH: 7.81	Temperature: N/A	Conductivity: N	/A	Tu	rbidity: N	/A	Flow Rate: 0.1		
Field Filtration Methods	Not Used	ı								
QC Samples	1 Hardnesss	and 1 Selenium								
Field Instrument Calibration Data	Run off has	a bubly appearance wi	th presence of oil	s andsedi	iment					
Indicators of Store Pollution Observe	xd? □	No 🗵 Yes (Describe):								
		to take as necessay si					nto chan	nel from adjacent roadway from		
Description of put to runoff from road		ountered or deviations	made from the F	Plan: This	was a	relatively	ease loo	cation to take sample from due		
* 5	ee ou	tfell Inspe	echons *	4						
Certification Statement (Refer to CGP Appendix B, Paragraph 9, for Signatory Requirements)										
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."										
A. Name: Shawn	Clarke			1	B. Title:	Civil En	gineer			
C. Signature:	Du	10		1	D. Date S	Signed: 2	2/13/25			



			Cor	nstruction Site Sar	nple Inform	nation				
Construction site Name:	∕Villow Wa	sh C	DF-3		MS4 Perm	it#	AZG 20	021-002		
Outfall Name: O	F -3		"Rep	resentative Outfall"?	☑ Yes l	□ No (ider	ntify represe	entative outfalls):		
Person(s)/Title(s) collecting sample: Shawn Clarke										
Person(s)/Title(s	Person(s)/Title(s) assisting with sample: Matt Thomas									
Date & Time Dis 12/13/25 2L06p		gan		ate Sample Collecte 1/13/25	d:		Tim- 2:09	e Sample Collected: pm		
Unique Sample I (Matches Identifi		;)	OF-3A and OF3-B							
Substitute Samp	ie? ⊠ t	10 C	☐ Yes (identify quarter	r/year when sample	was origina	ally schedu	iled to be c	ollected):		
Nature of Discha	rge: 🗵 R	ainfa	ill Snowmelt							
Rainfall Amount:	No of inch	es (	1.1							
				Field Samplin	ng Data					
Type of Sample	☐ Grat		Discrete ⊠ Manual							
Field Parameter Measurements						ty: NA	Flow Rate: 0.1CFS			
Field Filtration Methods	NA			•						
QC Samples	Seleniun	1/Ha	rdness							
Field Instrument Calibration Data	NA									
Indicators of Stor Pollution Observe			No ⊠ Yes (Describe)	): Insert details Oil/A	Asphalt					
Road. The storm	water has	whit		lark in color. It has r				of the roadway at London Bridge oil are present in the discharge		
Description of p		enco	ountered or deviation	ns made from the F	Plan: No Pr	oblems thi	s was one	of the better location for flow		
X Se	ec	SL	itfall Ins	spection	5 *					
Certification Statement (Refer to CGP Appendix B, Paragraph 9, for Signatory Requirements)										
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."										
A. Name: Shawr	Clarke				B.	Title: Civi	l Engineer			
C. Signature:	Eli	r	_		D.	Date Signe	d: 2/13/25	3		



Construction Site Sample Information										
Construction site Name:	EL DORADO V	WASH OF-4		MS4 Permi	t#.	AZG 202	21-002			
Outfall Name: Of	F-4	"Represe	entative Outfall"?	? ⊠ Yes □	□ No (ident	ify represe	ntative outfalls):			
Person(s)/Title(s) collecting sample: Shanw Clarke										
Person(s)/Title(s) assisting with sample: Matt Thomas										
Date & Time Disc 1:57pm	charge Began	<del>-12/13</del>	Sample Collecte <del>/15</del> 13   25	d:		Time 2:02p	Sample Collected: m			
Unique Sample Identifier (Matches Identifier on COC)  OF-4A and OF5 B										
Substitute Sampl	le? □ No 🛭	Yes Selenium and Hard	dness Sample Ta	aken:						
Nature of Discha		all   Snowmelt								
Rainfall Amount	0.1									
			Field Sampli	ng Data						
Type of Sample	☐ Grab ☐	Discrete ⊠ Manual □	Auto sampler (	12/13/25)						
Field Parameter Measurements	pH: 6.89	Temperature: temperature	Conductivity: co	onductivity	Turbidity	: turbidity	Flow Rate: rate			
Field Filtration Methods	NA						90			
QC Samples	Selenium an	d Hardness								
Field Instrument Calibration Data	NA									
Indicators of Ston Pollution Observe		No ⊠ Yes (Describe):								
Observations of	sampling pro	ocedures and condition	s at the time of	sampling:	Insert detai	ls				
*	See	atfull	Frspe	ction	s *					
Description of p	roblems enco	ountered or deviations r	nade from the F	Plan: Insert	details					
*	* See outfell Inspections *									
	Certification Statement (Refer to CGP Appendix B, Paragraph 9, for Signatory Requirements)									
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."										
A. Name: Shawn Clarke B. Title: Civil Engineer										
C. Signature:										



		to the same	Const	ruction Site Sa	mple Inf	ormation	LIB		Court of the	
Construction site Name:	INDUSTRI	AL DRAIN OF-5			MS4 Pe	ermit#	AZ	G 202	1-002	
Outfall Name: C	F -5	"R	Repres	entative Outfall"	? ⊠ Ye	s 🗆 No	No Sample	Taken	ı - No Dischange	
Person(s)/Title(	s) collecting	sample: Shawn Clark	e							
Person(s)/Title(	s) assisting	with sample: Matt Tho	mas							
Date & Time Dis No Sample Tak				Sample Collecte ample Taken - N	ed: Z lo Discha	//3 / . inge	/5	No Sa	Sample Collected: mple Taken - No Dischange ': 38 pm	
Unique Sample Identifier (Matches Identifier on COC)  No Sample Taken - No Dischange										
Substitute Samp	ole? 🗆 N	lo 🗆 Yes No Sample	Taken	- No Dischange						
		ninfall   Snowmelt								
Rainfall Amount:	0.1 Inches									
				Field Sampli	ng Data	34	10 N	77	1	
Type of Sample	☐ Grab	☐ Discrete ☒ Man	ual 🗆	Auto sampler (	No Samp	ole Taker	n - No Disch	nange)		
Field Parameter Measurements	pH: NA	Temperature: NA		Conductivity: N	Α	Tu	rbidity: NA		Flow Rate: NA	
Field Filtration Methods	NA									
QC Samples	NA									
Field Instrument Calibration Data	NA									
Indicators of Sto Pollution Observ		⊠ No □ Yes (Descr	ibe): N	IA						
Observations of	f sampling	procedures and con	dition	s at the time of	<b>sampl</b> ir	ng: No S	ample Take	en - No	Dischange	
Description of problems encountered or deviations made from the Plan: Insert details										
Certification Statement (Refer to CGP Appendix B, Paragraph 9, for Signatory Requirements)										
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my Inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."										
A. Name: Shaw	n Clarke					B. Title:	Civil Engin	eer		



A. Name:	Shawn Clarke	B. Title:	Civil Engineer
C. Signatur	e: Mul	D. Date	Signed: 2/13/24 2/13/25

Construction Site Sample Information									
Construction site Name:	Havasupai C	F-7			MS4 Permit	#	Insert AZ	G 2021-002	
Outfall Name: O	)F -7	"f	Representativ	e Outfall"?	☑ Yes □	No (identify	represen	tative outfalls):	
Person(s)/Title(s) collecting sample: Shawn Clarke									
Person(s)/Title(s) assisting with sample: Matt Thomas If available									
Date & Time Discharge Began: No Sample Taken - No Dischange  Date Sample Collected: No Sample Taken - No Dischange  Time Sample Collected: No Sample Taken - No Dischange  No Sample Taken - No Dischange									
Unique Sample (Matches Identif		NA							
Substitute Samp	ole? ⊠ No	☐ Yes (identify qua	arter/year whe	en sample	was originally	y scheduled	to be col	lected):	
Nature of Discha	arge: 🗵 Rair	fall   Snowmelt							
Rainfall Amount:	No of inches	0.1							
			Fiel	ld Samplir	ng Data				
Type of Sample	☐ Grab [	☐ Discrete ☐ Man	ual   Auto	sampler (D	Date/Time Co	llected)			
Field Parameter Measurements	pH: NA	Temperature: NA	Cond	luctivity: co	onductivity	Turbidity: N	NA	Flow Rate: 0.1 cfs	
Field Filtration Methods	NA								
QC Samples	NA								
Field Instrument Calibration Data	INA								
Indicators of Sto Pollution Observ		□ No □ Yes (Desc	ribe): NA						
Observations o	f sampling p	procedures and cor							
		No	Res	sulf	3 t	alce	er		
Description of problems encountered or deviations made from the Plan: Lack of stormwater run off									
		No	Re	5/1	ts h	uke			
	Certificat	ion Statement (Ref	er to CGP Ap	ppendlx B	, Paragraph	9, for Sign	atory Re	quirements)	



C. Signature:

| Complete a separate form for each outfall sampled)
| D. Date Signed: 2/13/25

Construction Site Sample Information										
Construction site Name:	Kiowa Drain C	DF-6		MS4 Permit	⊭. In	isert Au	thorization No.			
Outfall Name: O	F -6	"R	epresentative Outfall"	? ⊠ Yes □	No (identify re	epresen	tative outfalls):			
Person(s)/Title(s	s) collecting sa	ample: Shawn Clark	е							
Person(s)/Title(s	s) assisting wit	h sample: Matt Tho	mas							
Date & Time Dis No Sample Take			Date Sample Collecte No Sample Taken - N				Sample Collected: Imple Taken - No Dischange			
Unique Sample Identifier (Matches Identifier on COC) No Sample Taken - No Dischange										
Substitute Samp	ole? 🛛 No l	☐ Yes (identify qua	rter/year when sample	was originally	scheduled to	be coll	ected):			
		all   Snowmelt								
Rainfall Amount:	No of inches	0.1								
			Field Sampli	ng Data						
Type of Sample	☐ Grab ☐	Discrete 🗆 Man	ual 🗆 Auto sampler (	Date/Time Co	ilected)					
Field Parameter Measurements	pH: NA	pH: NA Temperature: NA Conductivity: NA Turbidity: NA Flow Rate: 0.1cfs								
Field Filtration Methods	NA									
QC Samples	NA									
Field Instrument Calibration Data	I Iamae Hai	land								
Indicators of Store		No ⊠ Yes (Descr	ibe): Large Amount of	Turbidity and	Possible Oils					
Observations o	f sampling p		ditions at the time of							
		No Re	esults f	a Kes						
							0			
Description of p			tions made from the l	*	• uooa .	more ra	in.			
		No Re	sults a	tall	ch					
Certification Statement (Refer to CGP Appendix B, Paragraph 9, for Signatory Requirements)										
designed to assure manage the system	e that qualified p n, or those pers te, and complet	personnel properly gat sons directly responsible. I am aware that the	hered and evaluated the ble for gathering the infor	information sub mation, the info	omitted. Based rmation submitt	on my in ted is, to	n accordance with a system equiry of the person or persons who the best of my knowledge and uding the possibility of fine and			



		TOT COOK OUT OUT OUT	1							
	Certification Statement (Refer to CGP Appendix B, Paragraph 9, for Signatory Requirements)									
designed to a manage the s belief, true, a	er penalty of law that this document and all attachments were prepassure that qualified personnel properly gathered and evaluated the system, or those persons directly responsible for gathering the infoccurate, and complete. I am aware that there are significant penalt for knowing violations."	ne information submit ormation, the informa	ted. Bas	ed on my inquiry of the person or persons who mitted is, to the best of my knowledge and						
A. Name: S	Shawn Clarke	B. Title:	Civil E	ingineer						
C. Signature:	Blu C	D. Date	Signed:	2/13/25 1:26 pm						

			Construction Site San	nple Informat	tion		
Construction site Name:	Felicidad Drai	n OF-9		MS4 Permit #	ŧ AZ	ZG 2021-002	
Outfall Name: O	F -9	"R	epresentative Outfall"?	✓ Yes 🗆	No (identify re	presentative outfalls	):
Person(s)/Title(s	s) collecting sa	ample: Shawn Clark	е	*			
Person(s)/Title(s	s) assisting wi	h sample: Matt Tho	mas				
Date & Time Dis No Sample Take			Date Sample Collecte No Sample Taken - No			Time Sample Colle No Sample Taken -	
Unique Sample (Matches Identif		No Sample Taken	- No Dischange				
Substitute Samp	ole? 🔲 No	☐ Yes No Sample 1	Taken - No Dischange				
		all   Snowmelt					
Rainfall Amount	0.1 inches						
			Field Samplin	ng Data			
Type of Sample	☐ Grab ☐	Discrete  Man	ual   Auto sampler (f	No Sample Ta	iken - No Disc	hange)	
Field Parameter Measurements	pH: NA	Temperature: NA	Conductivity: N	4	Turbidity: NA	Flow Rate: N	IA
Field Filtration Methods	NA						
QC Samples	NA						
Field Instrument Calibration Data	NA						
Indicators of Stor Pollution Observ		l No □ Yes (Descri	ibe): No Discharge				
Observations of	f sampling p	ocedures and con	ditions at the time of	sampling: No	Stormwater	Run Off To Observe	
		No	Resilts	)			



"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." B. Title: | Civil Engineer Shawn Clarke A. Name: D. Date Signed: 2/13/25 C. Signature:

			* A	Const	truction Site Sar	mple Informa	tion		
Construction site Name:	NEPTUNE	WA	SH OF-8			MS4 Permit	# A	ZG 202	21-002
Outfall Name: C	)F -2		"P	≀epres	entative Outfall"	? ⊠ Yes □	No (identify re	epreser	ntative outfalls):
Person(s)/Title(	s) collecting	sar	mple: Shawn Clark	e.					
Person(s)/Title(	s) assisting	 with	sample: Matt Tho	mas					
Date & Time Discharge Began: 12/13/25 1:26 pm				Date 2/13/	Sample Collecte /25	d:			Sample Collected:
Unique Sample (Matches Identil			OF-2 A and OF-2 i	В					
Substitute Samp	ole? ⊠ N	o [	Yes Collected at	curb a	adjacent to wash:	:			
Nature of Discha	<u> </u>	_							
Rainfall Amount:	No of inche	s 0	.1						
					Field Samplin	ng Data			
Type of Sample	☐ Grab		Discrete ⊠ Man	ual [	Auto sampler (	12/23/25 1:27	pm)		
Field Parameter Measurements	pH: 8.15		Temperature: NA		Conductivity: N	A	Turbidity: NA	\	Flow Rate: 0.1
Field Filtration Methods	NA								
QC Samples	NA								
Field Instrument Calibration Data	INIA								
Indicators of Sto Pollution Observ			No ⊠ Yes (Descr	ibe): (	Oil due to runoff f	rom street			
			ocedures and con ave enough diusch				ample taken fi	rom the	e flow line of the curb and gutter
Description of p	problems e	nco	ountered or devia	tions	made from the F	Plan: Lack of	Majow Rain		



Descripti	on of problems encountered or deviations made from the Plan: N	Run Off	At Was	sh
	Certification Statement (Refer to CGP Appendix B, Parag	raph 9, f	or Sign	natory Requirements)
designed to manage the belief, true,	der penalty of law that this document and all attachments were prepared under passure that qualified personnel properly gathered and evaluated the informat e system, or those persons directly responsible for gathering the information, the accurate, and complete. I am aware that there are significant penalties for sul the for knowing violations."	ion submit ne informa	ted. Bas tion sub	ed on my inquiry of the person or persons who mitted is, to the best of my knowledge and
A. Name: Shawn Clarke B. Title: Civil Engineer				
C. Signatur	e: Bhra	D. Date	Signed:	2/13/25



### **ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY**



### **AZPDES SMALL MS4 - WET SEASON DMR**

LTF #: 92548

**Report/Form ID #: 142088** 

**Date Submitted: 03/06/2025** 

### AZPDES SMALL MS4 WET SEASON DMR - SUMMARY

**Company:** 

Name: LAKE HAVASU CITY

Question: What is the sample date and lab result received date?

Answer:

Sample Date:

02/13/2025

Lab Result Received Date: 03/05/2025

Wet Season:

Winter Wet 2024-2025

Question: Identify all your outfalls for this DMR.

Answer:

Outfall Name/Number	Protected Surface Water Name	Latitude	Longitude
Location 1	Lake Havasu	34.458869	-114.333751
Location 2	Lake Havasu	34.463463	-114.342216
Location 3	Lake Havasu	34.476926	-114.355319
Location 4	Lake Havasu	34.488505	-114.358466
Location 5	Lake Havasu	34.494866	-114.361985
Location 6	Lake Havasu	34.501049	-114.363337
Location 7	Lake Havasu	34.504014	-114.364103
Location 8	Lake Havasu	34.511447	-114.366699
Location 9	Lake Havasu	34.524565	-114.370683

# Question: Do you need to provide a No Data Indicator (NODI) code for this report at the outfall level?

Answer: No

NODI Outfall Name/Number

# Question: How many samples for mandatory parameters have been taken for each outfall?

Answer:

Outfall Name/Number	Parameter	<b>Number of Samples</b>	

# Question: Did you take samples for any additional parameters that need to be included in the DMR?

Answer: Yes

Outfall Name/Number	Parameter	Number of Samples	
Location 1	TOTAL RECOVERABLE SELENIUM	1	
Location 2	TOTAL HARDNESS	1	
Location 2	TOTAL MAGNESIUM	1	
Location 2	TOTAL RECOVERABLE SELENIUM	1	
Location 3	TOTAL RECOVERABLE SELENIUM	1	
Location 4	TOTAL HARDNESS	Ĭ	

(520) 628-6733

Outfall Name/Number	Parameter	Number of Samples
Location 4	TOTAL MAGNESIUM	1
Location 5	TOTAL RECOVERABLE SELENIUM	1
Location 6	TOTAL RECOVERABLE SELENIUM	1
Location 7	TOTAL RECOVERABLE SELENIUM	1
Location 8	TOTAL RECOVERABLE SELENIUM	1
Location 9	TOTAL HARDNESS	1
Location 9	TOTAL MAGNESIUM	1
Location 9	TOTAL RECOVERABLE SELENIUM	1

Question: Upload completed Excel spreadsheet.

Answer:

File Name: wet\_dmr\_92548\_142088 (2).xlsx

Question: Your DMR has been checked for potential deficiencies.

Answer: No Potential Deficiencies Detected

### **CERTIFICATION OF SUBMISSION**

### **SHAWN M CLARKE**

You validated your identity by answering your personal security question and password on myDEQ at **09:43 AM** on **03/06/2025**. At this time, you certified the summary information above by checking that you agreed to the following statement:

### **Certify your submission:**

By checking this box I certify under penalty of law that this submittal was prepared by me, or under my direction or supervision of personnel appropriately qualified to properly gather and evaluate the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I understand that all information submitted to ADEQ is public record unless otherwise identified by law as confidential. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

(520) 628-6733

# Appendix F - Outfall Location Mapping/Written Procedures for Outfall Inspections/Inspections



### AZPDES SMALL MS4 WET SEASON DMR

### Summary

DOWNLOAD SUMMARY 🕹

Company Information:

LAKE HAVASU CITY

What is the sample date and lab result received

date?

Sample Date: 02/13/2025

Lab Result Received Date: 03/05/2025 Wet Season: Winter Wet 2024-2025

ldentify all your outfalls/field screening points for this report.

Outfall Name/Number	Protected Surface Water Name	Latitude	Longitude
CITY OF LAKE HAVASU MS4 - Location 1	Lake Havasu	34.458869	-114.333751
CITY OF LAKE HAVASU MS4 - Location 2	Lake Havasu	34.463463	-114.342216
CITY OF LAKE HAVASU MS4 - Location 3	Lake Havasu	34.476926	-114.355319
CITY OF LAKE HAVASU MS4 - Location 4	Lake Havasu	34.488505	-114 358466
CITY OF LAKE HAVASU MS4 - Location 5	Lake Havasu	34,494866	-114,361985
CITY OF LAKE HAVASU MS4 - Location 6	Lake Havasu	34.501049	-114.363337
CITY OF LAKE HAVASU MS4 - Location 7	Lake Havasu	34.504014	-114.364103
CITY OF LAKE HAVASU MS4 - Location 8	Lake Havasu	34.511447	-114.366699
CITY OF LAKE HAVASU MS4 - Location 9	Lake Havasu	34.524565	-114.370683

Do you need to provide a No Data Indicator (NODI) at the outfall level for this report?

No

NODI

|Outfall Name/Number

How many samples for mandatory parameters have been taken for each outfall?

There are not any mandatory parameters for the selected outfalls. However, please include at least one additional parameter in the following section to submit your DMR.

Did you take samples for any additional parameters that need to be included in the DMR?

Yes

Outfall Name/Number	Parameter	Number of Samples
CITY OF LAKE HAVASU MS4 - Location 1	TOTAL RECOVERABLE SELENIUM	1
CITY OF LAKE HAVASU MS4 - Location 2	TOTAL HARDNESS	1
CITY OF LAKE HAVASU MS4 - Location 2	TOTAL MAGNESIUM	1
CITY OF LAKE HAVASU MS4 - Location 2	TOTAL RECOVERABLE SELENIUM	ī
CITY OF LAKE HAVASU MS4 - Location 3	TOTAL RECOVERABLE SELENIUM	4
CITY OF LAKE HAVASU MS4 - Location 4	TOTAL HARDNESS	Ť

Outfall Name/Number	Parameter	Number of Samples	
CITY OF LAKE HAVASU MS4 - Location 4	TOTAL MAGNESIUM	1	
CITY OF LAKE HAVASU MS4 - Location 5	TOTAL RECOVERABLE SELENIUM	1	
CITY OF LAKE HAVASU MS4 - Location 6	TOTAL RECOVERABLE SELENIUM	1	
CITY OF LAKE HAVASU MS4 - Location 7	TOTAL RECOVERABLE SELENIUM	1	
CITY OF LAKE HAVASU MS4 - Location 8	TOTAL RECOVERABLE SELENIUM	1	
CITY OF LAKE HAVASU MS4 - Location 9	TOTAL HARDNESS	1	
CITY OF LAKE HAVASU MS4 - Location 9	TOTAL MAGNESIUM	Î	
CITY OF LAKE HAVASU MS4 - Location 9	TOTAL RECOVERABLE SELENIUM	1	

Upload completed Excel spreadsheet.

wet dmr 92548 142088 (2).xlsx

Your DMR has been checked for potential deficiencies.

✔ No Potential Deficiencies Detected

T = X



# Written Procedures for Outfall Monitoring

- 1. Record the Name of Persons Inspecting the Outfall.
- List the discharge point(s) (as indicated on the SWPPP map):
   Outfall Location 1-9 and Name of Wash. Example Outfall 2 Pima Wash at the Rotary Park and WOTUS. (See Outfall Map on the Following Page).
- 3. Record the Date of Inspection.
- 4. Record the Weather Conditions as noted on Stormwater Outfall Checklist.
- 5. Record the Pipe Material as the point source of the discharge and document with pictures.
- 6. Inspector to note Residential/Commercial/ Industrial location from SWMP.
- 7. Record odor at outfall location Sewage/Sulfide/Oil/Gas/Rancid or Sour.
- Record the Color of the Outfall Discharge as Yellow/Brown/Green/Gray/ Other (clear if not applicable).
- 9. Take a sample for the Discharge Monitoring Report to test for Selenium or Stormwater Characterization. Record whether the sample has turbidity as: Clear/Cloudy/Opaque.
- 10. Note any floatable in the stormwater discharge such as petroleum slick (sheen), raw sewage or trash.
- 11. Note deposits within the discharge such as Sediment/Oil or Other.
- 12. Under the section designated outfall pipe condition note a structural damage such as cracking, spalling, corrosion of corrugated metal pipe or peeling paint.
- 13. Note if an erosion is undermining the outlet structure or wingwalls (Yes or No).
- 14. Note the approximate square footage of damage.
- 15. In the section for Notes feel free to note any potential pollutant sources in the MS4 area that may be attributing to outfall.
  - A) Runoff from streets & driveways that enter the MS4 which may contain oil, grease and metals.
  - B) Runoff from residential and commercial property that discharge into the MS4 such as Pet and Wildlife waste, on-site wastewater leach age/seepage and or other materials.
  - C) Erosion along unpaved areas and or an adjacent construction site that may discharge sand, silt, sediment, asphaltic materials, cementitious materials etc.
  - D) Any discoloration at the outfall, presence of solids, foam or oil sheen.
  - E) Any other obvious indicators of storm water pollution.









### 2.2 Follow up screening

For any visual outfall monitoring that result in a proposed or verifiable illicit discharge, a follow up inspection will occur within 90 days to ensure that the illicit discharge does not reoccur. The Enforcement Response Plan (ERP), addresses the enforcement responses for traceable illicit discharges entering the MS4.







Name(s) of Person Inspectio	n the O	utfall:			
Outfall					
Date of Inspection:			-		
Weather over past 24 hours:		Rainy	Sunny	Cloudy	
Pipe Material: Concr	ete	Metal	Plastic	Clay	
Diameter in Inches:					
Known Industrial or Comme Discharges	rcial Us	ses in Drain	nage Area: N	o known discharge	s Known
Odor: None Sewage Other		Oil	Gas Rancid	or Sour	
Color: None Yellow	Brown	Green	Gray Oth	er	
Turbidity: Clear Cloudy	Opa	que			
Floatables: None Petrole Other		k Raw	Sewage Tras	sh	
Deposits: None Sedimen	t Oi	l Other			
Vegetation: Normal Growth	Exc	essive Gro	wth Inhibite	d Growth	
Outfall Pipe Condition: No I	Damage	s Crack	ting Spalling	Corrosion	Peeling Paint
Has Erosion Undermined the	stabilit	ty of the ou	tfall: Yes No	o	
Extent of Erosion Damage in Over 500	_	e Feet: Non	e Under 100	Between 100	and 500
Notes:					

Stormwater Outfall Inspection Checklist

SURWN CURNED/Meth

ion the Outfall: Pina Wash

Nors Name(s) of Person Inspection the Outfall: 2 - Pina Wash Date of Inspection: Sunny Cloudy Weather over past 24 hours: Rainy Metal **Plastic** Clay Pipe Material: Concrete Diameter in Inches: No known discharges Known Industrial or Commercial Uses in Drainage Area; Known Discharges Rancid or Sour Odor: None Sewage Sulfide Oil Gas Other Other Color: None Yellow Brown Turbidity: Clear Cloudy Opaque Floatables: None Petroleum Slick Raw Sewage Trash Other NONE Deposits: None Sediment Oil Other Vegetation Normal Growth Excessive Growth Inhibited Growth Outfall Pipe Condition: No Damages Cracking **Peeling Paint** Spalling Corrosion Has Erosion Undermined the stability of the outfall: Yes Extent of Erosion Damage in Square Feet: None Under 100 Between 100 and 500 Over 500 Notes: atthew Thomas 3 Shawn Clark

Name(s) of Person Inspection the Outfall: SHAWN CLARKE, P.B.
Name(s) of Person Inspection the Outfall: SHAWN CLARKE, P.B.  Outfall Aveen's Bay Wash a Hwy 95
Date of Inspection: $\sqrt{\frac{1}{2025}}$
Weather over past 24 hours: Rainy Sunny Cloudy
Pipe Material: Concrete Metal Plastic Clay
Diameter in Inches: Double Box structure
Known Industrial or Commercial Uses in Drainage Area: No known discharges Known Discharges
Odor None Sewage Sulfide Oil Gas Rancid or Sour Other None Sewage Sulfide Oil Gas Rancid or Sour
Color None Yellow Brown Green Gray Other
Turbidity: Clear Cloudy Opaque UA
Floatables: None Petroleum Slick Raw Sewage Trash Other
Deposits: None Sediment Oil Other
Vegetation: Normal Growth Excessive Growth Inhibited Growth
Outfall Pipe Condition: No Damages Cracking Spalling Corrosion Peeling Paint
Has Erosion Undermined the stability of the outfall: Yes No
Extent of Erosion Damage in Square Feet None Under 100 Between 100 and 500 Over 500
Notes: Pictures taken of trash 3 shopping curt in
Box alvert from Homeless. No How is present @
the time of inspection. The streets Department was present to Piscuss removal of trush 3 debis.
No stains on the Box collect to where present
No water Samples taken Due to lack of Praince

	Name(s) of Person Inspection the Outfall SHAWN CLARKE Matt Thes
	Name(s) of Person Inspection the Outfall: SHAWN CLARKE/Matt Phelo Outfall OPF -7 - Havasypa; wash
	Date of Inspection: $\frac{3/13/2-5}{2}$
1	Weather over past 24 hours: Rainy Sunny Cloudy
July	Pipe Material: Metal Plastic Clay
	Diameter in Inches: MA
	Known Industrial or Commercial Uses in Drainage Area: No known discharges Known Discharges
	Odor: None Sewage Sulfide Oil Gas Rancid or Sour Other
	Color: None Yellow Brown Green Gray Other
	Turbidity: Clear Cloudy Opaque
	Floatables: None Petroleum Slick Raw Sewage Trash Other
	Deposits None Sediment Oil Other
	Vegetation: Normal Growth Excessive Growth Inhibited Growth
	Outfall Pipe Condition: No Damages Cracking Spalling Corrosion Peeling Paint
	Has Erosion Undermined the stability of the outfall: Yes
	Extent of Erosion Damage in Square Feet: None Under 100 Between 100 and 500 Over 500
	Notes:

	Name(s) of Person Inspection the Outfall: Felicidad Drain
	Outfall
	Date of Inspection: 3/13/25
	Weather over past 24 hours: Rainy Sunny Cloudy
Culvert	Pipe Material: Concrete Metal Plastic Clay
	Diameter in Inches:
	Known Industrial or Commercial Uses in Drainage Area: No known discharges Known Discharges
	Odor: Sewage Sulfide Oil Gas Rancid or Sour Other
	Color: None Yellow Brown Green Gray Other
	Turbidity: Clear Cloudy Opaque
	Floatables None Petroleum Slick Raw Sewage Trash Other
	Deposits None Sediment Oil Other
	Vegetation: Normal Growth Excessive Growth Inhibited Growth
	Outfall Pipe Condition: No Damages Cracking Spalling Corrosion Peeling Paint
	Has Erosion Undermined the stability of the outfall: Yes No
	Extent of Erosion Damage in Square Feet: None Under 100 Between 100 and 500 Over 500
	Notes: Some Minor Spalling of anete
	May Went to fix in fature

Name(s) of Person Inspection the Outfall: Sham Club Matt Thomas Outfall OF - / Parton Wash
Name(s) of Person Inspection the Outfall:
Outfall OF - 1 Paytorn Wash
Date of Inspection: $\frac{2}{13}/25$
Weather over past 24 hours: Sunny Cloudy
Pipe Material: Concrete Metal Plastic Clay
Diameter in Inches: NR
Known Industrial or Commercial Uses in Drainage Area: No known discharges Known Discharges
Odor None Sewage Sulfide Oil Gas Rancid or Sour Other
Color: None Yellow Brown Green Gray Other
Turbidity Clear Cloudy Opaque
Floatables: One Petroleum Slick Raw Sewage Trash Other
Deposits: None Sediment Oil Other
Vegetation: Normal Growth Excessive Growth Inhibited Growth
Outfall Pipe Condition: No Damages Cracking Spalling Corrosion Peeling Paint
Has Erosion Undermined the stability of the outfall: Yes No
Extent of Erosion Damage in Square Feet: None Under 100 Between 100 and 500 Over 500
Notes: Brand New Construction Q wash
little to no Discharge

	in a commence full H There
	Name(s) of Person Inspection the Outfall: Straw Cumuca / Marie
	Name(s) of Person Inspection the Outfall: Stynn CCANICE /M1 H Thurs  Outfall OF -2 fine wash wash
	Date of Inspection: 2-13-3
	Weather over past 24 hours: Rainy Sunny Cloudy
hion	Pipe Material: Concrete Metal Plastic Clay
•	Diameter in Inches:
	Known Industrial or Commercial Uses in Drainage Area: No known discharges Known
	Odor: None Sewage Sulfide Oil Gas Rancid or Sour Other
	Color: None Yellow Brown Green Gray Other
	Turbidity: Clear Cloudy Opaque
	Floatable None Petroleum Slick Raw Sewage Trash Other
	Deposits: None Sediment Oil Other
	Vegetation: Normal Growth Excessive Growth Inhibited Growth
	Outfall Pipe Condition: No Damages Cracking Spalling Corrosion Peeling Paint
	Has Erosion Undermined the stability of the outfall: Yes No
	Extent of Erosion Damage in Square Feet: None Under 100 Between 100 and 500 Over 500
	Notes: Grey/Black Stormule Colorto
	Dre to Asphalt Road.

	Stormwater Outfall Inspection Checklist Matt Thomas
	Name(s) of Person Inspection the Outfall:
	Name(s) of Person hispectionate outrain.
	Outfall OF -3 Willow Wash
	Date of Inspection: $2-13-25$
	Weather over past 24 hours: Rainy Sunny Cloudy
wet	Pipe Material: Concrete Metal Plastic Clay
	Diameter in Inches:
9	Known Industrial or Commercial Uses in Drainage Area: No known discharges Known  Discharges
,	Odor: None Sewage Sulfide Oil Gas Rancid or Sour Other
	Color: None Yellow Brown Green Gray Other Bibbles
	Turbidity: Clear Cloudy Opaque
	Floatables: On Petroleum Slick Raw Sewage Trash Other
	Deposits: None Sediment Oil Other
	Vegetation: Normal Growth Excessive Growth Inhibited Growth
	Outfall Pipe Condition No Damages Cracking Spalling Corrosion Peeling Paint
	Has Erosion Undermined the stability of the outfall: Yes
	Extent of Erosion Damage in Square Feet None Under 100 Between 100 and 500 Over 500
	Notes:

Stormwater Outfall Inspection Checklist		
Name(s) of Person Inspection the Outfall: Strong Clanus / Matt Thoms  Outfall El Dorado Worn (OF-4)		
Name(s) of Person Inspection the Outfall:		
Outfall El Dorado Wush (OF-4)		
Date of Inspection: $2-13-25$		
Weather over past 24 hours: Rainy Sunny Cloudy		
Pipe Material: Concrete Metal Plastic Clay		
Diameter in Inches:		
Known Industrial or Commercial Uses in Drainage Area: No known discharges Known  Discharges		
Odor: None Sewage Sulfide Oil Gas Rancid or Sour Other		
Color: Yellow Brown Green Gray Other		
Turbidity: Clear Cloudy Opaque		
Floatables: None Petroleum Slick Raw Sewage Trash Other		
Deposits: None Sediment Oil Other		
Vegetation: Normal Growth Excessive Growth Inhibited Growth		
Outfall Pipe Condition: No Damages Cracking Spalling Corrosion Peeling Paint		
Has Erosion Undermined the stability of the outfall: Yes No		
Extent of Erosion Damage in Square Feet; None Under 100 Between 100 and 500 Over 500		
Notes:		

Name(s) of Person Inspection the Outfall: SHOWN CLANKE - Matt Thurse's
Name(s) of Person Inspection the Outfall: SHRWW COFFICIAL
Outrall
Date of Inspection: 2-13-25
Weather over past 24 hours: Rainy Sunny Cloudy
Pipe Material: Concrete Metal Plastic Clay
Diameter in Inches:
Known Industrial or Commercial Uses in Drainage Area: No known discharges Known Discharges
Odor: None Sewage Sulfide Oil Gas Rancid or Sour Other No Discharge
Color: None Yellow Brown Green Gray Other No Discharge
Turbidity: Clear Cloudy Opaque
Floatables: None Petroleum Slick Raw Sewage Trash Other
Deposits: None Sediment Oil Other
Vegetation: Normal Growth Excessive Growth Inhibited Growth
Outfall Pipe Condition: No Damages Cracking Spalling Corrosion Peeling Paint
Has Erosion Undermined the stability of the outfall: Yes No
Extent of Erosion Damage in Square Feet: None Under 100 Between 100 and 500 Over 500
Notes: No DIschage @ Mis locatuch

Name(s) of Person Inspection the Outfall: SHAW CLANICE /Matt The
Outfall $OF-7$
Date of Inspection: 2-13-55
Weather over past 24 hours: Rainy Sunny Cloudy
Pipe Material: Concrete Metal Plastic Clay
Diameter in Inches:
Known Industrial or Commercial Uses in Drainage Area: No known discharges Known Discharges
Odor: None Sewage Sulfide Oil Gas Rancid or Sour Other No Discher
Color: None Yellow Brown Green Gray Other No Discharge
Turbidity: Clear Cloudy Opaque
Floatables: None Petroleum Slick Raw Sewage Trash Other
Deposits: None Sediment Oil Other
Vegetation: Normal Growth Excessive Growth Inhibited Growth
Outfall Pipe Condition: No Damages Cracking Spalling Corrosion Peeling Paint
Has Erosion Undermined the stability of the outfall: Yes No
Extent of Erosion Damage in Square Feet: None Under 100 Between 100 and 500 Over 500
Notes: No Discharge

•
Name(s) of Person Inspection the Outfall: B SHAWN CLANKE / Matt Thous
Outfall OF-B
Date of Inspection: $2-13-25$
Weather over past 24 hours: Sunny Cloudy
Pipe Material: Oncrete Metal Plastic Clay
Diameter in Inches:
Known Industrial or Commercial Uses in Drainage Area: No known discharges Known Discharges
Odor None Sewage Sulfide Oil Gas Rancid or Sour Other
Color: None Yellow Brown Green Gray Other
Turbidity: Clear Cloudy Opaque
Floatables Vone Petroleum Slick Raw Sewage Trash Other
Deposits: None Sediment Oil Other
Vegetation: Normal Growth Excessive Growth Inhibited Growth
Outfall Pipe Condition: No Damages Cracking Spalling Corrosion Peeling Paint
Has Erosion Undermined the stability of the outfall: Yes No
Extent of Erosion Damage in Square Feet, None Under 100 Between 100 and 500 Over 500
Notes:

## **Stormwater Outfall Inspection Checklist**

Name(s) of Person Inspection the Outfall: SHAWN CLANUE 3 Matt Among
Outfall OF -9
Date of Inspection: 2-13-25
Weather over past 24 hours: Rainy Sunny Cloudy
Pipe Material: Concrete Metal Plastic Clay
Diameter in Inches:
Known Industrial or Commercial Uses in Drainage Area: Nown discharges Known  Discharges
Odor: None Sewage Sulfide Oil Gas Rancid or Sour Other No Diochres
Color: None Yellow Brown Green Gray Other No Discharge
Turbidity: Clear Cloudy Opaque
Floatables: None Petroleum Slick Raw Sewage Trash Other No Pischery
Deposits: None Sediment Oil Other No Wall
Vegetation: Normal Growth Excessive Growth Inhibited Growth
Outfall Pipe Condition: No Damages Cracking Spalling Corrosion Peeling Paint
Has Erosion Undermined the stability of the outfall: Yes No
Extent of Erosion Damage in Square Feet: None Under 100 Between 100 and 500 Over 500
Notes:

## Appendix G - Illicit Discharge Reporting

## memo

## Lake Havasu City

To: Mike Wolfe, P.E.

From: Shawn M. Clarke, P.E.

CC:

**Date:** 1/8/2025

**Re:** Policy and Procedures for Reporting Illicit Discharge

Below is the procedural process on how the city of Lake Havasu plans to Eliminate illicit Discharges through the Development Services Program and Code Enforcement. (Section 6.3.3 of Notice Of Violation -ADEQ)

- 1) Engineering staff to Visual Observe Take Photos of the illicit discharge and record the address of the violation.
- 2) Engineering Staff to Notify the owner by telephone of the illicit Discharge.
- 3) Engineering staff to educate the discharge regarding the illicit discharge city code section 8.28.160 enforcement. Give 3 to 5 days for the issue to be remediated.
- 4) Code Enforcement to send a written notice regarding the stormwater violation to owner, Engineering cc'd on letter.
- 5) After the owner complies with remediation request. Take photos and document remediation efforts. Notify code enforcement of compliance.
- 6) Code Enforcement sends auto clearance of notice of termination of violation in a letter.

## **Pressure Washing & Surface Cleaning**

## Stormwater Best Management Practices



Discharge of pressure washing wastewater to the storm drain system is prohibited because it contains pollutants from cleaning compounds or from the surfaces being cleaned. But, when done properly, pressure washing activities can help improve the quality of our waters and have a positive effect on the environment. When pollutants are removed from pressure washed surfaces, there is less chance for those pollutants to end up in our waterways.

Рторег	Disposal of Pressure Wa	ashing Wastewater
Discharge to landscaped areas without drywells	Sidewalk/Plaza Areas	* No outdoor eating areas, food, or garbage * No cleaning additives
	Building Surfaces	<ul> <li>No peeling paint or paints with heavy metals</li> <li>No cleaning additives</li> </ul>
Discharge to sanitary sewer or contained for off-site disposal	Sidewalk/Plaza Areas	<ul> <li>No outdoor eating areas, food or garbage</li> <li>Non-hazardous cleaning additives</li> </ul>
	Building Surfaces	<ul> <li>No peeling paint or paints with heavy metals</li> <li>Non-hazardous cleaning additives</li> </ul>
Discharge to sanitary sewer equipped with appropriate pretreatment device (oil/water	Sidewalk/Plaza Areas	* Outdoor eating areas     * Non-hazardous cleaning additives
separator, interceptor, sediment trap, etc) or contained for off-	Parking Lot & Delivery Areas	Non-hazardous cleaning additives
site disposal	Dumpster Areas	** Non-hazardous cleaning additives
Discharges that must be contained for off-site disposal	flammable additives	g solvents or any other potentially hazardous or ling paint; surfaces containing heavy metal paints;

## What Can I Do?

- Sweep or vacuum all dirt, debris, and trash prior to washing.
- Use absorbent materials to clean-up oil deposits.
- Use as little water, without detergents as possible.
- Seal all stormwater inlets in the area that is being cleaned.
- Contain and collect wastewater using temporary berms, vacuums, and pumps.
- Train employees and post Best Management Practices.





Public Works Engineering/Stormwater Division For additional information, please contact:
Lake Havasu City Engineering Department
Stormwater Quality Program
900 London Bridge Road
Lake Havasu City, AZ 86404
928-855-3377

https://www.lhcaz.gov/public-works/storm-water-management

			Did the district				
Date incident reported or discovered	Date of the beginning of your response	Date of the end of your response	a protected surface water (yes, no, or unknown)	Incident location (address or latitude and longitude)	Pollutants	Source	Correction method(s)
3/24/2025	4/23/2025	7/9/2025	No	90 Swanson Ave	Grease	Restaurant	Cleaned Hoods/Pressure wash retain on site,
6/9/2025	6/9/2025	6/11/2025	No	2706 Huntington Drive	Concrete Spoils	Contractor	Spoils Removed From Site
6/3/2025	6/3/2025	6/3/2025	No	2495 San Juan Drive	Gasoline	Contractor	Active Investigation - Termite Company Disposed of Soil w/ Hydrocrabons
6/2/2025	6/2/2025	6/11/2025	No	1670 McCulloch	Kitchen Grease	Restaurant	Education - Owner to wash mats inside with grease trap
5/1/2025	5/7/2025	5/1/2025	No	3384 El Dorado Ave	Erosion for discharge line	Property Owner	Invalid Complain - No Correction Needed
4/29/2025	4/29/2025	5/2/2025	No	210 Swanson Ave	Unknow Discharge	Unknown	Dumpster Was Cleaned Up
4/19/2025	4/19/2025	5/20/2025	Na	453 Lake Havasu Ave N	Paint /Chemicals	Contractor	Violation Issued
4/2/2025	4/2/2025	5/2/2025	No	2790 Kiowa Blvd	Pool Draining	Paol Contractor	Code Compliance Voluntary Correction Notice Issued
3/27/2025	3/27/2025	6/27/2025	No	1550 Palo Verde	Dumpster liquid	unknown	Violation Issued - VL01929
3/25/2025	3/25/2025	6/23/2025	Na	112 London Bridge Road	Water From Restaurant	Restaurant	Cause of Leak Fixed on Private Property
3/14/2025	3/14/2025	Mar-25	No	1420 McCullouch	Trash Dumped	Restaurant	Staff Cleaned up Dumpster - Illegal Dumping occuring -VL01841
2/4/2025	2/4/2025	3/13/2025	No	3269 Maricopa Ave	Water Discarge - Unknown	Home Owner	Irrigation Fixed by Owner
2/4/2025	2/4/2025	2/12/2025	No	1670 McCullach Blvd	Pressure Washing - Chemicals	Restaurant	Voluntary Correction Notice Sent - Pressure Washing Stopped
1/7/2025	1/7/2025	1/30/2025	No	1420 McCulloch Blvd	Trash Dumped	Restaurant	Voluntary Correction Notice Sent - Cleaned Up Trash
12/30/2024	12/30/2024	12/30/2024	ON	2435 Antlandic Drive	Sewage/Drainege Connections	Motorhome	Owner Removed Hose from Wash with Discharge
12/18/2025	12/18/2025	5/9/2025	Unknown - Close To Lake	1425 Mcculloch Blvd	Sewage Discharge	Private Pump Station	Vacation Rental Violation Notice - CE 24-0585/ Voluntary Correction Notice - CE24-0585
12/18/2024	12/18/2024	2/25/2025	No	1607 Industrial Bvd	Oil Discharge	Business	Owner Cleaned Up oll - Voluntary Correction notice - : CE24-0583
2/12/2024	2/12/2024	2/2/2025	Unknown - Wash	1617 Induustrial Blvd	White Discharge	Tri-State Solutions	Voluntary Correction notice - : CE24-0559
4/2/2025	4/2/2025	4/29/2025	No	3400 Plam Groove Drive	Pool Draining/ Chlorine	Pool Discharge	Voluntary Correction Notice - : CE25-0284
11/18/2024	11/198/2024	Nov-24	No	761 AngelFish	Discharge From Motorhome	Home Owner	Violation Number: CE24-0482
10/14/2024	10/14/2024	12/31/2024	Unknown - Wash	1595 DOVER AVE,	Running Water -Chemicals	Wolfe Matorsports	VOLUNTARY CORRECTION NOTICE- Violation Number: CE24-0355
						*	

## Appendix H - Employee Training Material



## **PUBLIC WORKS** THE AMERICAN **ASSOCIATION**

IS PLEASED TO PRESENT THIS CERTIFICATE TO

## Matthew Thomas

FOR THE COMPLETION OF

# STORMWATER OPERATIONS AND MAINTENANCE CERTIFICATE PROGRAM

Virtual Program on February 25, 26, and 27, 2025.

The recipient of this certificate is awarded .6CEUS/6PDH credits for completion of the certificate program.

Becky Stein U

Deanne Cross Associate Director of Education

## **Shawn Clarke**

From:

Shawn Clarke

Sent:

Tuesday, January 7, 2025 2:41 PM

To:

Greg Hanson; Matthew Thomas; James Holland; Jeff Murphy

Cc:

Mike Wolfe

Subject:

Stormwater Outfall Training Video

Attachments:

Stormwater Outfall Inspection Checklist.pdf

**Engineering Stormwater Samplers,** 

Attached is an outfall inspection video for our stormwater MS4 sampling process. I have attached a checklist for all outfall inspections. It is preferable these outfall inspection occur during rain events, However we will need to conduct a minimum of 25% - 3 outfalls per year. Please respond that you have received the checklist and have watched the attached video for the official training record. I will file your response for the attendance record.

https://youtu.be/10SfmdlKPMY?si=Sb0U3AWcNUm63k0s

Thank you,

Shawn M. Clarke, P.E.
Civil Engineer
Public Works Dept. | Engineering Division
900 LONDON BRIDGE ROAD, LAKE HAVASU CITY, AZ 86403

## **Shawn Clarke**

From:

Greg Hanson

Sent:

Tuesday, January 7, 2025 3:22 PM

To:

Shawn Clarke

Subject:

RE: Stormwater Outfall Training Video

## Shawn

I have reviewed the video about MS4 Outfall inspections. I have also reviewed the Stormwater Outfall Inspection checklist.

Hava great day

## Gregory Hanson

**Engineering Tech Coordinator** 

900 London Bridge Road Lake Havasu City, AZ 86403



From: Shawn Clarke < ClarkeS@lhcaz.gov> Sent: Tuesday, January 7, 2025 2:41 PM

To:

Cc:

Subject: Stormwater Outfall Training Video

Engineering Stormwater Samplers,

Attached is an outfall inspection video for our stormwater MS4 sampling process. I have attached a checklist for all outfall inspections. It is preferable these outfall inspection occur during rain events, However we will need to conduct a minimum of 25% - 3 outfalls per year. Please respond that you have received the checklist and have watched the attached video for the official training record. I will file your response for the attendance record.

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Thank you,

Shawn M. Clarke, P.E.

## **Civil Engineer**

Public Works Dept. | Engineering Division

900 LONDON BRIDGE ROAD, LAKE HAVASU CITY, AZ 86403

ClarkeS@LHCAZ.GOV

## **Shawn Clarke**

From:

James Holland

Sent:

Wednesday, January 8, 2025 10:25 AM

To:

Shawn Clarke

Subject:

Re: Stormwater Outfall Training Video

Received the checklist and watched the video.

## James Holland

Water Compliance Specialist 925 Port Dr.

Lake Havasu City, AZ 86404



From:

Sent: Tuesday, January 7, 2025 2:41 PM

To:

C ..

Subject: Stormwater Outfall Training Video

**Engineering Stormwater Samplers,** 

Attached is an outfall inspection video for our stormwater MS4 sampling process. I have attached a checklist for all outfall inspections. It is preferable these outfall inspection occur during rain events, However we will need to conduct a minimum of 25% - 3 outfalls per year. Please respond that you have received the checklist and have watched the attached video for the official training record. I will file your response for the attendance record.

https://youtu.be/10SfmdlKPMY?si=Sb0U3AWcNUm63k0s

Thank you,

Shawn M. Clarke, P.E.

**Civil Engineer** 

Public Works Dept. | Engineering Division

900 LONDON BRIDGE ROAD, LAKE HAVASU CITY, AZ 86403

## **Shawn Clarke**

From:

**Matthew Thomas** 

Sent:

Tuesday, January 7, 2025 3:34 PM

To:

Shawn Clarke

**Subject:** 

RE: Stormwater Outfall Training Video

## Complete

From:

Sent: Tuesday, January 7, 2025 2:41 PM

To:

Cc:

Subject: Stormwater Outfall Training Video

**Engineering Stormwater Samplers,** 

Attached is an outfall inspection video for our stormwater MS4 sampling process. I have attached a checklist for all outfall inspections. It is preferable these outfall inspection occur during rain events, However we will need to conduct a minimum of 25% - 3 outfalls per year. Please respond that you have received the checklist and have watched the attached video for the official training record. I will file your response for the attendance record.

https://youtu.be/10SfmdlKPMY?si=Sb0U3AWcNUm63k0s

Thank you,

Shawn M. Clarke, P.E.
Civil Engineer
Public Works Dept. | Engineering Division
900 LONDON BRIDGE ROAD, LAKE HAVASU CITY, AZ 86403

Good Housekeeping and & Pollution Prevention training video links for ADEQ

https://youtu.be/I2Dy\_oKYJ\_E?si=t2VFKYYOOwK1HuJb

https://youtu.be/YgjPdqfw80M?si=L3u\_UulhVqV6KACb



PROJECT NO.: MS-4 Synstem Audit Section .6.2

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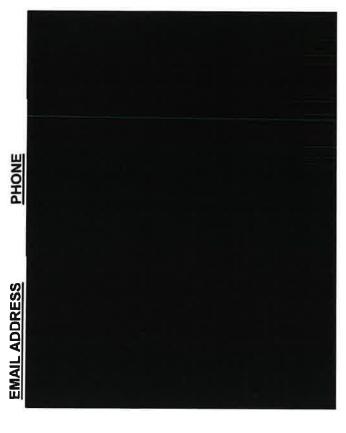
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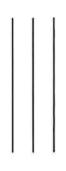
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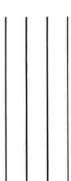
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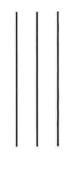
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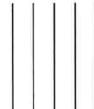


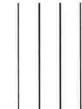


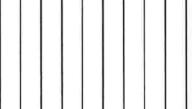












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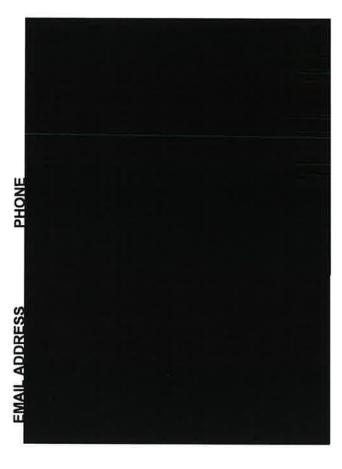
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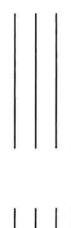
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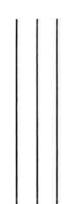
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## **Municipal Facility Inspection Form**

Lake Havasu City
900 London Bridge Road Lake Havasu City, AZ 86403
Phone 928-855-3377

General Facility Information			
Facility Name: Supeture		Inspection Date/Ti	me: 4/11/25
Address: 2400 sweetwa	ter Ave 100	NAICS Code: N.	A.
Owner: City of Lake	e Havusu	Onsite Representative: Bull	Xany
MSGP: 🗆 Yes 🥻 No	SWPPP:   Yes Y No '		
Weather Conditions: 5000-Y	n fall? Yes 🗆 No		
Laskspulades Lhave so		Rights (20010720-SB1598)	
		my inspections rights (see reverse).	
1. Structural Stormwater Contro		0.6	Functioning Properly
1. Inlet control @ c	MP PIPE - I	nstall wade us	X Yes □ No
2. Perinte Contro	1 - waddl	45	☐ Yes ☐ No
3.@ Lar point ins	tall oheck	Dan to Destiting	☐ Yes ☐ No
4.		Basin	☐ Yes ☐ No
5.			☐ Yes ☐ No
2. Materials Storage and Transfe	r Area(s) Inside only or	under cover? (If was skin to 3)	I INTERNATION
1. / 1/e/h	e ( e	Secondary containment?	☐ Yes No
GASOLINE - SHE	Linu	Evidence of leaks and spills?	☐ Yes No
2 /	40.5	Secondary containment?	Yes No
1. GASOLINE - Vehi 2. CQS /TACIC		Evidence of leaks and spills?	Yes No
Spill Response Materials Available	e? 🛛 Yes 🗆 No	evidence of reals and spins:	LA IS LI NO
Spill Response Materials Labeled		Evidence of release(s)?	☐ Yes 🛣 No
3. Housekeeping Practices	AND THE PARTY OF		TOP OF THE PARTY
Solid waste Debris, o	pen lids, missing plugs, i	residue present?	☐ Yes 🕅 No
Bulk storage Debris or	erosion present? Barrie	ers missing or failing?	☐ Yes 💆 No
	l, or residue present?		☐ Yes 🛕 No
Presence of leaks/other	conditions that could le	ead to pollutant discharge?	☐ Yes No
4. Vehicle Maintenance Areas	CHAPTER TO SERVICE		A Addition to
Are all parked vehicles (or other e	equipment with fuel/oil	tank) functioning properly?	Von E No
s there evidence of leaks or spills	• •		Yes No
If Yes, are drip pans in		1	☐ Yes No
Jsed tire storage area clean and i			☐ Yes ☑ No
			☐ Yes 🂢 No
5. Corrective Action and Enforce		ed onsite? (If Yes, skip to Signatures)	☐ Yes 🔀 No
Corrective Action(s): See	Attached	List)	Correct-by Date:
1. Vehicle fuelity - secon	brestithnys	remove	4 30 25
. DISPOSE OF Old water	Bin P's - Alber	Colls/ waller	9 30 25
		-	4/30/25
1. vehicle tresh pe	511thy 1863 a		1/30/25
Signatures		Lake Hearisti Cit	
Facility Representa		City of Scannishe Repre	
Print Name William A			WHIKE
Signature		nature	11
con Jours	5 411425	Mue a	- 411/2

## Sweetwater Yard Inspection Corrections:

- 1) General site cleaning Removal of Trash.
- 2) Vehicle Fueling Needs Second Containment.
- 3) Dispose of waterline pipe and fittings.
- 4) Cold Mix bin needs proper BMP's Sandbags & Vis-queen.
- 5) Dumpster Lid Keep Closed.
- 6) Dispose of Concrete Bags.
- 7) Remove Asphalt Pile
- 8) Inlet control around CMP Outlet Pipe with waddles.
- 9) Stockpiles need waddles/sandbags for BMPs.
- 10) Vehicle Washout needs desilting basin
- 11) Site could use check dam to desilting basin at low point of site near vehicle wash out.
- 12) Dispose of old tire.
- 13) Clean up around CQS Tanks and remove debris/trash.
- 14) Clean up tack.
- 15) Patch Concrete Sewer Manhole.
- 16) Sweep Paved surfaces.



## **Municipal Facility Inspection Form**

Lake Havasu City
900 London Bridge Road Lake Havasu City, AZ 86403
Phone 928-855-3377

General Facility Information		
Facility Name: Walnut VARD	ne: 4/11/25	
Address: 1867 Walnut Dr. Lake Haw	ISU CUTY AZ NAICS Code: N	la '
Owner: City of Lake Havney	Onsite Representative: Bill Y	oung
MSGP: ☐ Yes V No	SWPPP: Yes No	
Weather Conditions: SUNNY 3 CLAR	More than 72 hours since last rain	fall? 🛮 Yes 🗌 No
Notice of Inspection I	Rights (20010720-SB1598)	Line was to
	my mapections rights (see reverse).	1
1. Structural Stormwater Controls		Functioning Properly?
1. CLEAN OUT REDENTION BA		☐ Yes 🔼 No
2. Fix Slope Drumage W/ Rip Rup		☐ Yes 🐼 No
3 CLEDN PEPE TO DRAZN	40 mast	☐ Yes 🗹 No
4.		Yes No
5.		☐ Yes ☐ No
2. Materials Storage and Transfer Area(s) Inside only or	under cover? (If yes, skip to 3)	ALWARES IN
	Secondary containment?	☐ Yes 🔀 No
1. Hydrauhe oil	Evidence of leaks and spills?	▼ Yes □ No
2.	Secondary containment?	☐ Yes 🔀 No
	Evidence of leaks and spills?	🔯 Yes 🗌 No
Spill Response Materials Available? X Yes 🗆 No		
Spill Response Materials Labeled? 💢 Yes 🗆 No	Evidence of release(s)?	☐ Yes 💢 No
3. Housekeeping Practices	PARTY NAMED IN STREET	while the property is a
Solid waste Debris, open lids, missing plugs,	residue present?	Yes 🗆 No
Bulk storage Debris or erosion present? Barrie		Yes 🔼 No
Floors and surfaces Liquid, oil, or residue present?		☐ Yes 🔀 No
Presence of leaks/other conditions that could le	ead to pollutant discharge?	☐ Yes 🖳 No
4. Vehicle Maintenance Areas	CANAL STREET	AT WATER DE ST.
Are all parked vehicles (or other equipment with fuel/oil	tank) functioning properly?	☐ Yes 'X No
s there evidence of leaks or spills under or near vehicles		∐ Yes ☐ No
If Yes, are drip pans in use?		Yes 🔀 No
Jsed tire storage area clean and under cover?	NOT Applicable	
Corrective Action and Enforcement All issues correcte		Yes No
Corrective Action(s): See the attached	1121	Correct-by Date:
LICLEAN out retention Bas	514	1/30/25
PISPOSE OF OLD Concrete	. 1291	4 130120
Slope Drainage		4 134 25
	Anna Anna Anna	
Signatures	Charles Havas	
Print Name William A. Young Print Name	City of State le Represent Name SHAWN CLA	
	nt Name SHYWW CLAN	uce
wayoung 4-11/125	Mu	41 11112
7 / 203		

## Walnut Yard Inspection Corrections:

- 1) General site cleaning Removal of Trash.
- 2) Clean out Retention Basin
- 3) Clean out Drainage overflow pipe at Retention Basin.
- 4) Dispose of Concrete bags that are open.
- 5) Dispose of Vegetation in front of dumpster.
- 6) Gas Cans need cap.
- 7) Store Fertilizer inside storage bins.
- 8) Dispose of torn Tarps.
- 9) Hydraulic Oil/ Concrete compound needs section containment.
- 10) Second Containment bins are not being used (See comment 9).
- 11) Edge Master Machine for landscaping Dispose of Leaking oil.
- 12) Dispose of rusted cans with oil/paint/.
- 13) Dispose of Playground mat.
- 14) Place BMP's such as fiber rolls around asphalt millings.
- 15) Dispose of oil Behind Porta-Potty.
- 16) Use oil containment on vehicles.



## Municipal Facility Inspection Form Lake Havasu City

TO APORATED 1918		ad Lake Havasu City, AZ 86403 928-855-3377	1 4/11/25 10:30
General Facility Inform			
Facility Name: Publ		BridgeRd Inspection Date/Tim	ne:
Address: 900 Lon	iden Bridge Road	NAICS Code: NA	
	ake Havasu	Onsite Representative: Bill Y	ares
MSGP: 🗆 Yes 🗱	No	SWPPP:  Yes No	-
Weather Conditions:	CLOUPY/RAINY	More than 72 hours since last rain	fall? Yes No
THE RESERVED OF THE PERSON OF	Notice of Inspection I	Rights (20010720-SB1598)	
I acknowled	ge I have read and been informed of		ALSO RESIDENCE
1. Structural Stormwa			Functioning Properly?
1. Retention E			∑X Yes □ No
2. CMP CULU	ents Need Clea	n out	☐ Yes 🔀 No
3. Parking 1	of Sweeping of	Aggregate	⊠. Yes □ No
	trash a Debris a	n Site.	✓ Yes □ No
5.			☐ Yes ☐ No
2. Materials Storage ar	nd Transfer Area(s) inside only or	under cover? (If ves. skin to 3)	A THE MANAGEMENT
		Secondary containment?	☐ Yes 🕅 No
Paint (	ANS	Evidence of leaks and spills?	Yes M No
		Secondary containment?	☐ Yes 🕅 No
Paint (	<sup>2</sup> an.5	Evidence of leaks and spills?	Yes No
ipill Response Material		The state of the springs	100 100 1100 1100 1100 1100 1100 1100
pill Response Material		Evidence of release(s)?	Ø Yes □ No
. Housekeeping Practi			
Solid waste	Debris, open lids, missing plugs,	residue present?	Ż Yes □ No
Bulk storage	Debris or erosion present? Barrie		Yes No
	Liquid, oil, or residue present?		Yes No
	aks/other conditions that could le	ead to pollutant discharge?	© Yes □ No
		to policione discharge.	
. Vehicle Maintenance		The second of th	A. 101 See 11-11-11
	or other equipment with fuel/oil		☐ Yes 🌠 No
	ks or spills under or near vehicles:	•	Yes No
	ip pans in use?		X Yes No
sed tire storage area o			Yes 🔀 No
	Enforcement All issues correcte		☐ Yes 🔯 No
orrective Action(s):	Jee list on Bac		Correct-by Date:
Sweep Parkir		Vehical Wash cleanout	4/30/25
Retention Basin	n Clean out	Full of Sodiment	4/30/25
Cold WIX BID !	reed cover ? Agg. Bin. a	Paint chips on Buck Road	4/30/25
Secondar Contain	ment Paint 30,1 7	sellist.	4/30/25
gnatures			Carlo Manager
ALCOHOL: NAME OF THE OWNER.	epresentative	City of Scottsdale Repres	
rint Name Willio		It Name SHAWN CHAN	CE
gnature way		nature S	4
0	114	en a	4/11/25

## List of Items on Inspection of Public Works Building:

- 1) Clean out retention basin from debris.
- 2) Clean out culverts draining from wash behind public work filled with vegetation.
- 3) Cold Mix/Sand, Aggregate needs a cover or canopy.
- 4) All Paint and oil storage to be covered with second containment. Second containment for emulsion broken.
- 5) Street sweep the entire parking lot to remove loose aggregate and sediment.
- 6) Vehicle and equipment wash down area drain to be cleaned out Clogged with sediment.
- 7) Vehicle and equipment need signage with drain labeled where it drains too (Sewer/Storm drain is prohibited)
- 8) Cover all trash bins. Replace trash bins with broken lid.
- 9) Roll off dumpster has leak in bottom.
- 10) Concrete bags are broken and uncovered. Clean up and store properly.
- 11) Paint buckets are out in the open with brushes. Paint is spilling in locations.
- 12) Trash needs to be cleaned out behind masonry wall.
- 13) Old tires are not under a cover from the atmosphere.
- 14) Old reflectors need to be discarded. Container holding them made of wood is broken.
- 15) Steel drums that are corroded and rusted need to dispose of properly.
- 16) Old paint cans that are rusted need to be disposed of properly.
- 17) Paint chips are breaking off on asphalt road uphill of retention pond.
- 18) Clean out trash and debris in wash adjacent to yellow painted road.
- 19) Sediment BMPs from slope need to be addressed uphill from public works parking lot next to antennae. Erosion is head cutting the slope.
- 20) Oils spills with kitty litter need to be cleaned up. Need to use drip pans for leaky vehicles.
- 21) Deery Boxes with crack sealant needs to be contained correctly.

## **Shawn Clarke**

From:

Sent:

Tuesday, April 15, 2025 8:07 AM

To:

Matthew Thomas

Cc:

Greg Hanson; Shawn Clarke; Mike Wolfe

Subject:

RE: maintenance request

## Good morning,

I will forward this email to our operations department.

We should be able to take care of this for you.

I will have someone reach out to you directly from our local office.

Thank you

## Carol Thompson

REPUBLIC SERVICES 2011 COLLEGE DRIVE LAKE HAVASU CITY AZ 86403 OFFICE 928/505-7411

From

Sent: Tuesday, April 15, 2025 8:02 AM

To: Cc:

Subject: maintenance request

## This Message Is From an External Sender

This message came from outside your organization.

Report Suspicious

## Good morning,

The city has recently completed some in house environmental audits/inspections and it was noted that a significant number of our trash receptacles/dumpsters have missing or deteriorated lids, likely due to sun damage and wind. We would like to compile a list of dumpsters needing replacement lids or other maintenance and put in a request to address these environmental concerns. I saw online there is a portal to submit maintenance requests but was concerned about the size of our service area. Would this be handled through online reporting through logging or is there a more efficient way of addressing this? Thank you for any guidance regarding this situation.

## Matthew Thomas

## **Engineering Tech Coordinator**

Public Works Dept.

900 LONDON BRIDGE ROAD, LAKE HAVASU CITY, AZ 86403



## Appendix I – Public Outreach



## 面

## Identify the target group for outreach and education.

General Public

## Identify the topic(s) for the target group.

Post-construction ordinances and long-term maintenance requirements for permanent stormwater controls

Stormwater runoff issues and residential stormwater management practices

Potential water quality impacts of application of pesticides, herbicides and fertilizer and control measures to minimize runoff of pollutants in stormwater

Illicit discharges and illegal dumping, proper management of non-stormwater discharges, and to provide information on reporting spills, dumping, and illicit discharges

Spill prevention, proper handling and disposal of toxic and hazardous materials, and measures to contain and minimize discharges to the storm sewer system

Installation of catch basin markers or stenciling of storm sewer inlets to minimize illicit discharges and illegal dumping to storm sewer system

Proper management and disposal of used oil

Community activities (monitoring programs, environmental protection organization activities, etc.)

## Describe how the message was conveyed to the target group.

We used facebook to share a video in regards to our updated stormwater management plan which is open for public comment. In this video we discussed illicit discharge, illegal dumping, pressure washing and how to keep Lake Havasu Beautiful using our stormwater management plan and policies. This video helps educate the public on stormwater discharge issues within our community. Please find the links below. Whats Up Havasu: Facebook Link. https://youtube.com/shorts/HEFdqFmwXJQ?si=BMxKX-M-Lw2m-vDT Here is the You Tube Link to The video: https://youtu.be/4Gke8m\_S9il? si=yWEzRKzVEI4byYsn https://www.lhcaz.gov/public-works/storm-water-management

## Describe measures/methods used to assess the effectiveness of the message conveyed to the target group.

Our Facebook video on our stormwater program had 1,300 views in the first week that it was published. The facebook vide oalso had 37 likes, 10 comments and 1 share. Some of the comments discussed issues such as: 1) Is it illegal to drain your pool? 2) I didn't know it rained in lake Havasu 3) What is stormwater 4) Excellent

## Impacts on Stormwater Discharges to Education and Public Outreach for MS4

By Shawn M. Clarke, P.E.



Stormwater Management Plan

Lake Havasu City Department of Public Works



## Required Minimum Control Measures

- Illicit Discharge Detection and Elimination
- Public Education and Outreach
- Public Participation and Involvement
- Construction Inspections (Including Inspection of Municipal Facilities)
- Construction Site Run Off Control (BMP's, Construction entrance/Silt Fence)
- Post construction Best Management Practices which include Low Impact Design Measures.

## § 8.28.080 DISCHARGE PROHIBITIONS.

All illicit discharges to the public storm drain system are prohibited. These include, but are not limited to the following:

1. Discharges that are a source of pollutants, including discharges through connections that are a source of pollutants.

Discharge of soil, rock, trash, garbage and other waste.

3. Maintaining, establishing, or using a connection that allows a discharge.

Discharge from commercial car washing, mobile car washing, or impervious surface pressure washing operations.

Discharge from concrete washing and truck washout.

. Discharge of oils, fuels, paints, greases.

7. Discharge of grit and sand from grinding.

8. Discharge from carpet cleaning.

Discharge of chlorinated water from spas, swimming pools, and similar facilities.

10. Discharge resulting from misrepresentation of the nature of discharge on an application, a plan, permit, or certification.

11. Discharge not disclosed on an application, plan, permit, or certification.

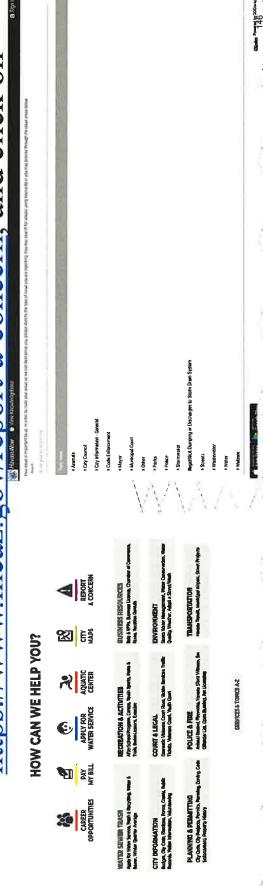
Discharge of wastewater as defined in Lake Havasu City Code Chapter 8.05 and this chapter.

13. Continuing a discharge that has not been permitted by the city. The prohibition regarding illicit discharge includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of construction.

## Illicit Discharges and Illegal Dumping

- ■An Illicit Discharge is a violation of city code section 8.28.080.
- ■Any dumping of any material in a Wash which conveys stormwater to the lake.
- Reporting of Illicit Discharge Please visit the Lake Havasu City Website at





# Pressure Washing For Restaurants/Commercial Business's

## Pressure Washing & Surface Cleaning

Stormwater Best Management Practices



is prohibited because it contains pollutants from deaning compounds or from the surfaces being cleaned. But, when done properly, pressure wasting activities can help improve the quality of our waters and have Oscharge of pressure washing wastewater to the starm drain system

a positive offect on the environment. When pollutants are removed from pressure washed surfaces, there is less chance for those

pollutants to and up in our waterways.

Proper D	Proper Disposal of Pressure Washing Westewater	ş	9 Westewater
then harps to leading of over- without dynamic	Submether flats Appear		No eastfact emitty group, boot, or garbage. No chapsing shiftings.
	Compact Colorest	11	the proving paint or pains with incorp solded
contained for off site disposed	Salary Salars		Inchesion deringstille
Distribute to sandary comes	Samuel (Victorian	10	Children reditty areas
ungen der, irder regiter, nafarente	Dadeny Lat & Didmey A.	ů.	New Properties Country additions
ute deposed	Chargedon Aven	i,	- Han-hazardaus deming additions
Dishaps that must be contained for off the diseast	<ul> <li>Any suckers describe salving parameters of any other polantials; breaches on Removaling specimes</li> </ul>	ł	Any surfaces closered self-ty potentiti or any other potentials freezones o Ferminals selections

Sweep or vacuum off dirt, debns, and trash prior to washing.

Building surfaces with peeling point; surfaces containing heavy metal points, using hazardous additives

Nammable additives

- Seal all stormwater inlets in the area that is being cleaned. Use as little water, without detergents as possible.
- Contain and collect wastewater using temporary berms, vacuums, and pumps. Irain omployees and post Bost Management Practices.



For additional information, please contact Lake Hovasu City Engineering Department Lake Havasu City, AZ 86404 900 London Bridge Road

https://www.lhcaz.gov/public-works/starm-wate

### No peeling paint or paints with heavy metals No peofing paint or paints with heavy metals No outdoor eating areas, food, or garbage No outdoor eating green, food or garbage Any surfaces cleaned using solvents or any other potentially hazardous or Non-hazardous cleaning additives No cleaning additives No clearing additives Outdoor eating areas Proper Disposal of Pressure Washing Wastewater Parting Lot & Delivery Areas Sidewalk/Plaza Areas Sidewalk/Plaza Aveza Sidewalk/Plaza Areas Building Surfaces Building Surfaces Dumpster Areas Discharge to sankary sewer equipped with appropriate prefer atment device (oil/water separator, inter copine, sedament it ap, etc) or contained for off-Discharge to landscaped areas without drywells Discharge to sanitary sever or contained for off-site disposal Discharges that must be contained for off-site disposal

## Spill Prevention & Disposal of Toxic and Hazardous Materials

# For Household Hazardous Waste Disposal please visit the city webpage at

# https://www.lhcaz.gov/fire-department/household-hazardous-waste



## Proper Management and Disposal of Used Oil

ground, but instead, take it to a designated recycling location like AutoZone, Advance To properly dispose of used oil in Lake Havasu City, never pour it down drains or into the Auto Parts, or a local waste management facility



O'Reilly Auto Parts

Up to 5 gallons per visit

C (928) 855-6094 Q 1769 McCulloch N., Lake Havasu City, AZ

Republic Services

Do not take all to the Republic Services office or the landfill - it will not be accepted.

C (928) 855-9441 Q 2001 College Dr. Lake Havasu City, 4Z

# Impacts of Pesticides Herbicides and Fertilizer

- Pesticides are toxic to aquatic organism including fish and wildlife.
- \*Stormwater runoff carries pollutants like pesticides, herbicides, fertilizers, oil, and debris directly into streams and rivers, degrading water quality.

## Algal Blooms and Oxygen Depletion:

Excess nutrients from fertilizers, particularly nitrogen and phosphorus, can stimulate algal blooms in lakes and rivers. When these blooms die and decompose, they consume large amounts of oxygen, leading to hypoxic (low oxygen) conditions that can suffocate fish and other aquatic life.

Remember all stormwater eventually discharges into the Lake during a rain event.





## Stenciling of Storm Drain Inlets

The primary goal of stenciling storm drains is to raise public awareness about the connection between storm drains and local waterways (lakes, rivers, streams, etc.) and to discourage the dumping of pollutants into them.

### How it works:

Stencils are used to paint messages like "Dump No Waste - Drains to Sound" or "No Dumping - Drains to [Waterway]" on the storm drain

### Why it's important:

facilities, but in reality, they often discharge directly into natural water People often mistakenly believe that storm drains lead to treatment bodies. By educating the public, stenciling helps reduce non-point source pollution, such as oil, trash, and pet waste, that can contaminate our waterways.





## Post-Construction & Long-Term Maintenance

Retention Basins – Detention Basins shall be cleaned out and maintained on an annual basis.

Maintenance Procedures will Include the following:

- 1) Inspection of pipes and channels that convey flow to BMP Facility.
- 2) Removal of trash, vegetation, sediment & debris such as leaves, lawn clippings & sticks or brush.

visit Post Construction Bmp sites to view the inspection portal of the underground Retention Basin. The owner will be financially Underground Retention - Shall be cleaned out on an annual basis by means of a Vector truck. City Stormwater inspectors will responsible for the removal of trash, vegetation, sediment & debris as required under section 8.28 of the city code.



Retention Pond requiring sediment removal.



Example of an underground Retention facility.

# Community & Environmental Activities in LHC

## Adopt a Street/Wash Program:

Lake Havasu City has an "Adopt a Street/Wash Program" where civic groups, families, or businesses volunteer to pick up litter along washes.

### Invest In Our Planet:

LAKE HAVASU EARTH DAY - ROTARY DAY OF SERVICE March 29, 2025 8:00 AM - 12:00 PM

## House Hold Hazardous Waste Day Event

January 16, 2025

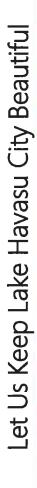
https://www.lhcaz.gov/news/article/household-

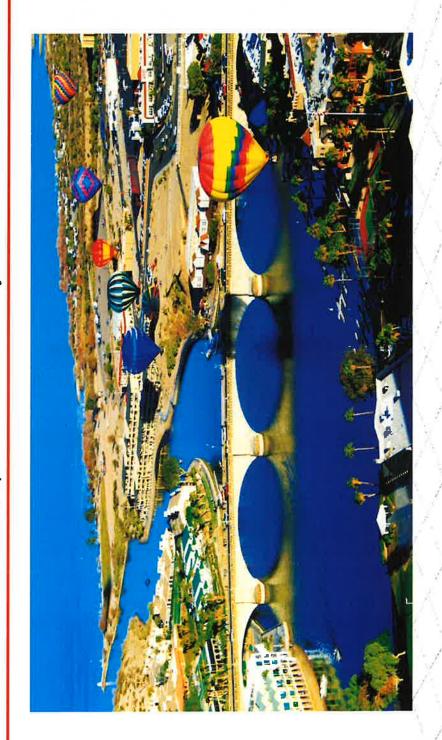
hazardous-waste-day-event2025

## Keep Havasu Beautiful Committee:

https://www.facebook.com/KeepHavasuBeautifulOfficial/









### **Community Clean-Up**

Public · Event by Lake Havasu City Rotary Club





•••

Your response is visible to the hosts and ♣ Friends ▼

- 1425 McCulloch Blvd N, Lake Havasu City, AZ, United States, Arizona 86403
  1425 McCulloch Blvd N, Lake Havasu City, AZ 86403-6500, United States
- 2 going · 12 interested















Home

Video

Friends

Dating

Notifications

Menu

### **Shawn Clarke**

From: Matthew Thomas

Sent: Tuesday, January 14, 2025 1:46 PM

To: Shawn Clarke
Cc: Mike Wolfe

**Subject:** FW: LHC News-Free Residential Household Hazardous Waste Event

Attachments: Outlook-City Logo; 2025-01-14 PR Free Residential Household Hazardous Waste

Event.doc; LHC HHW 2025 Final (1).pdf

This might be a good opportunity to document some community outreach and get some flyers set up.

From:

Sent: Tuesday, January 14, 2025 1:39 PM

To:

Subject: LHC News-Free Residential Household Hazardous Waste Event

### FOR IMMEDIATE RELEASE

January 14, 2025

### Free Residential Household Hazardous Waste Event

Republic Services offers a Free Residential Household Hazardous Waste event on Saturday, February 1, 2025, from 8:00 a.m. to 12:00 p.m. The event occurs at Fire Station 2, located at 2065 Kiowa Boulevard, North, with public access at College Drive. Signs are posted in the vicinity to assist residents with drop-off.

The event is open to Lake Havasu City residents only and offers safe disposal of a wide range of household-generated hazardous wastes. Improper disposal of household hazardous wastes, such as pouring them down the drain, on the ground, into sewers, or in some cases, putting them out with the trash, can pollute the environment and threaten human health.

No commercial or industrial waste is accepted. Residents must bring an ID with a Lake Havasu City address or a recent billing statement showing a subscription to trash service within Lake Havasu City.

Accepted at this event: Paint (max 15 gallons, and consolidated into 5 to 6-gallon buckets if possible): oil and latex, stains, varnishes, solvents, thinners, and adhesives; Automotive Parts and fluid (max 30 gallons of fluid): motor oil, filters, antifreeze, car batteries, gasoline, tires (max of 4, off rim only), oily water, oily rags and debris, and oily dirt; Other Chemicals: flammable liquids and aerosol cans (no pesticides); Fluorescent Tubes: tubes, bulbs, and other mercury-containing lamps (not broken); Batteries: AA, AAA, C and D cells and button batteries; and, E-Waste (max 3 items): televisions, computers, monitors, DVD players, CPUs, hard drives, microwaves, computer mouse, shredders and radios.

<u>Not Accepted at this event:</u> pesticides, poisons, corrosives, medical waste, broken lights, construction debris, and pharmaceuticals.

Lake Havasu City encourages all residents to take advantage of this opportunity to dispose of hazardous items from their homes. For additional details, please visit Lake Havasu City's website at <a href="https://www.lhcaz.gov">www.lhcaz.gov</a> or contact Republic Services at (928) 855-9441.

Attachment: Event Flyer

Community Engagement Officer: Jerri Bracamonte (928) 854-0801

-- END --

### Jerri Bracamonte | Community Engagement Officer | City Manager Office

2330 McCulloch Boulevard N. l Lake Havasu City, AZ, 86403 l 928.854.0801 l ext. 4198 l bracamontej@lhcaz.gov



All messages created in this system belong to Lake Havasu City and may be considered a public record subject to disclosure under the Arizona Public Records Law (A.R.S. 39-121). City employees, City public officials, and those who generate email to them, should be aware that these e-mails may be subject to public disclosure to the media and or individuals making a public records request.

In addition, to ensure compliance with the Open Meeting Law, Council or Board/Commission members who are recipients of this message should not forward it to other members of the Council or Board/Commission of Lake Havasu City. Council Members or Board/Commission Members may reply to a staff member regarding this message, but they should not send a copy of a reply to other Council or Board Members.

## 000000

Keeping the streets, washes, and lake free of debris and pollutants will ensure a healthy aquatic environment in Lake Havasu City.

Protecting our beautiful lake from pollution begins with you! Help protect the lifestyle and water resources that make Lake Havasu City a great place to live, work and play!





## LAKE HAVASU CITY Community Services

(928) 453-4149

## 00000

### YOU CAN HELP CONTROL STORM WATER RUNOFF POLLUTION

Storm Water pollution occurs when rain falls on impervious (hard) surfaces such as parking lots and streets. Pollutants like oil, grease, and trash collect as the water drains off the surface and into a nearby waterway. The same pollutants may also enter the waterways as they are sprayed off by residents and business owners who are attempting to clean their property or



The eastern shoreline of Lake Havasu including the Bridgewater Channel is the primary permanent waterway in Lake Havasu City. All of our washes drain runoff with associated sediment and pollutants directly into the lake. 158

# 

### Storm Water Pollution? Why Should You be Concerned about

District and the Cenwater source for the Metropolitan Water Southern California Lake Havasu is the First and foremost, source and major City's primary drinking water



As chemical pollutants enter the lake and the water filters through the sediment beneath the lake, these pollutants threaten the water quality at our wells. Along with threatening our drinking water these pollutants are capable of discoloring the water and endangering other wildlife. Various species of fish feed on organisms that These organisms either die off or can pass the may be the most susceptible to pollutants. Lake Havasu City Water Treatment Plant from wells next to pollutants along to the fish when eaten. and Tucson metro



## **Effects of Storm Water Runoff**

- Oil, gas, antifreeze, and other household hazardous wastes including pesticides can travel for long distances affecting the aquatic environ-
- Sediment can cloud the water, interfering with plant growth, larvae development, and fish nesting.
- and other aquatic organisms. among grease and other Bacteria and other pathogens products impact fisheries similarly punoj pooj may



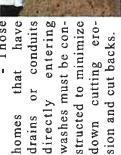
tact or consumption of affected organisms and All of the above leads back to the endangerment of human health through the unwary conthrough the primary drinking water supply.

## Steps to Prevention

### 1) Home and Yard

- Never dispose into drainage channels any yard debris, trash, construction pounds, or other items as they may impede drainage flow and/or will be carried down materials, oils, hazardous chemical comthe washes towards the lake.
- maintenance shop. Also, wash your car at pose of your vehicular fluids at a local car a commercial car wash that recycles the Check your car for leaks and dis-

covering bare surfaces with decorative Those residences adjacent to washes also sion control on the wash slopes to prevent landscape gravel or drought tolerant plants. may have to add riprap or some other ero-· Control erosion from your yard by cut back.





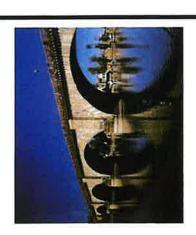
## Construction Practices, the 3 C's

- Control to prevent materials from entering our washes and the lake.
- Contain by isolating the work area to prevent discharges from leaving the site.
- Capture by cleaning up daily the debris and pollutants created during your work and disposing of it properly.
  - Do not dump leftover dirt, gravel, oil, or cement where streets cross washes as this blocks runoff into the washes.

### 3) Businesses

- walks to clear debris without pick up and disposal only spreads the material to other Spraying parking lots or sideplaces, flushes pollutants into washes, drains and is a waste of water.
- terceptors and possible discharge into a - Restaurants need to keep grease traps unclogged to prevent overflow of indrainage way or the lake.
- charge Elimination System) permit before - State law requires a business to obtain an AZPDES (Arizona Pollutant Disany discharges can take place.

What you do in your yard or property affects more than just your neighbors and the waters of Lake Havasu City. waters and public health by reporting pollution when you see it happening along roadsides, rest areas, parks and neighborhoods. Please notify City officials with any information on illicit discharges and connections that produce pollution.





Lake Havasu City Public Works (928) 453-6660

### Illicit Discharge Detection & Elimination



Water quality of Lake Havasu and water quality of Lake Havasu and water quality for all the communities downstream from Lake Havasu City. It is important that we eliminate these discharges to the maximum extent possible to keep our waters clean and blue for everyone.

## According to ADEQ Illicit Discharge is defined as:

"any discharge to a municipal separate storm sewer system (MS4) that is not composed entirely of storm water."



### What are Illicit

### Discharges?

Some of the pollutants that fall under this broad category when discharged without a permit are:

- · Car Wash Wastewater
- Gas & Motor Oil
- · Kitchen Grease/Oils
- · Household Cleaners
  - Paints
- Pesticides

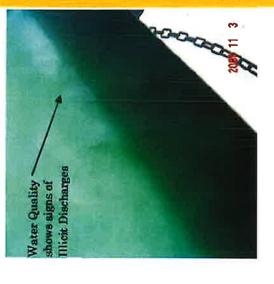
### Allowable Non-Storm Water Discharges:

Under the AZPDES Small MS4 General Permit there are some discharges that are allowed because they are not considered to be significant contributors of pollutants to or from the MS4.

These discharges are as follows:

- · Water Line Flushing
- · Landscaping Irrigation
- · Diverted Stream Flows
- · Rising Ground Water
- · Uncontaminated Ground Water Infiltration
- · Discharges From Potable Water Sources
- · Foundation Drains
- · Air Conditioning Condensation
- Springs
- · Water From Crawl Spaces
- · Footing Drains
- · Individual Car Washing
- · Discharge From Riparian Habitats
- · Street Wash Water
- · Discharges From Emergency Fre-Fighting Activities

An Illicit Connection is the discharge of pollutants or non-storm water materials into a storm sewer system via a pipe or other direct connection. Sources of illicit connections may include sanitary sewer taps, wash water from laundromats or carwashes, and other similar sources that are discharged to the environment.



### What's Up, Havasu — Clean Water Starts With Us!

### JERRI:

"What's Up Havasu! Ever wonder where stormwater goes? I'm joined by Tim and Shawn from Public Works to talk about how we protect our lake when it comes to stormwater management.

### TIM:

That's right, Jerri! We've just updated our *Storm Water Management Plan*, and it's open for public comment right now. This plan helps keep pollutants out of our washes, streets, and lake.

### JERRI:

And joining us is civil engineer Shawn Clarke to explain why this matters.

### SHAWN:

Definitely. Stormwater might seem like just rain running off into the street, but it picks up everything in its path—like oil, trash, metals and chemical which carries pollutants into our lake. These pollutants impact swimming, boating, fishing and aquatic life. Our new stormwater management plan helps us keep stormwater clean, and everyone can play a part in the process.

### TIM:

Our goal is simple—stop pollution before it starts. We've outlined steps like public education, construction controls, and inspections to make sure dirty water doesn't flow into our lake.

### JERRI:

The City has a policy on pressure washing. Can you give us some information on that and why it's important?

### SHAWN:

It is illegal to discharge pollutants into the street, storm drains & washes. If you do pressure wash, you must collect the water by using vacuums with temporary barriers for collection of pollutants such as chemicals & soaps. Only clean water may be discharged under the city ordinance for stormwater.

### JERRI:

And if someone sees dumping happening?

### SHAWN:

Download our HavasuNow App or visit our website at **www.lhcaz.gov/report-a-concern** and click on *Stormwater – Illegal Dumping*. Easy as that.

### TIM:

Love the lake? Let's keep it clean! Join a cleanup, adopt a wash, or just spread the word—it starts with us!"

### JERRI:

Big thanks to both of you for all the important work you're doing to protect our lake and keep Havasu beautiful. That's what's up, Havasu—protect our lake, and visit Ihcaz.gov/stormwater to watch the full presentation and get more tips on keeping our water clean!

### **TEXT ON SCREEN:**

Learn more + read the full plan: Ihcaz.gov/storm-water-management

Appendix J – Low
Impact Development
Plan
https://www.lhcaz.gov/
public-works/stormwater-management

### Low Impact Development Improvements 2024-2025

Location: Queen's Bay Wash

Project Number: B25-PW-105007-500548

Work Description:

The project consists of constructing a new culvert crossing across the Queen's Bay Wash. The construction will include re-profiling the existing roadway for the new culvert. Re-profiling will include reconstruction of existing pavement and curb and gutter. Low Impact Improvements, such as a trash rack, have been installed at the upstream end of the culvert. The purpose of the trash rack is to collect trash and debris before entering the Lake which is considered a Water of the United States (WOTUS). The trash rack has been installed at the Queen's Bay Wash which serves The commercial sector of lake Havasu. Please find the attached post construction photos of the trash rack.











### Appendix K – Post Construction Policies & Procedures, Inspections

### LAKE HAVASU CITY



### Public Works Department, Engineering Division

900 London Bridge Road, Lake Havasu City, AZ 86404 Phone: 928.453.6336 www.lhcaz.gov

### Procedures for Implementation and Inspection of Post Construction BMP's

This document establishes a clear, written procedure for implementing the Post-Construction Stormwater Facilities program, including City site inspections. It outlines the responsibilities of both the City and the landowner, specifies inspection frequency, details City documentation requirements, and defines enforcement actions for non-compliance.

The goal of the Lake Havasu City Engineering Division is to effectively implement Post-Construction Stormwater Facilities Best Management Practices (BMP) and ensure sustainable operations for both new and previously approved facilities. All developments requiring post-construction stormwater facilities must execute a Stormwater Management BMP Facilities Maintenance Agreement, which is recorded against the property prior to the issuance of development permits.

This agreement establishes the landowner's responsibility to operate and maintain the facility while allowing for City inspections and notification of deficiencies. It also outlines the City's authority to enforce compliance with the municipal code regarding proper facility maintenance and operation.

### 1. Purpose and Scope:

Ensure compliance with the City's Stormwater Management Plan and MS-4
Discharge Permit while safeguarding water quality and protecting the
environment.

Inspect all sites with a Stormwater Facility Maintenance Agreement within 5 years after initial approval of the constructed facility.

### 2. Roles and Responsibilities:

- **Inspector:** The Engineering Division will provide trained and qualified stormwater inspectors to report to the Engineering Manager.
- Landowner: The legally responsible party for maintaining the Post-Construction BMP Facility in accordance with the Stormwater Facility Maintenance Agreement.

 Authority: The City has the authority to conduct inspections, issue notifications, and enforce code compliance.

### 3. Inspection Frequency and Timing:

- Landowners should conduct inspections annually after the facility's final inspection and City approval.
- · Landowners must maintain records of yearly inspections.
- The City will inspect the facility's operation and maintenance at least once every five years and notify the landowner of any deficiencies as needed.
- It is the Goal of the Engineering Division that 20% of all active Post-Construction BMP's be inspected within each annual reporting period.

### 4. Inspection Procedures:

### Post-Construction BMP Maintenance Checklist:

- Develop a detailed checklist to ensure Post-Construction Best Management controls are inspected. The checklist will include the inspection of the retention basins or underground retention facilities to confirm they are free from sediment build up, erosion, trash, debris, and unwanted vegetation. Additionally, it will cover the condition of structural controls, including inlets, outlets, and spillways.
- The landowner will receive a completed inspection checklist from the Engineering Division after the initial inspection has been carried out. If corrective action is required, the landowner will have 180 days to notify the Engineering Division that the facilities are ready for reinspection.
- If corrective action cannot be achieved within 180 days, the property/landowner will be referred to Code Enforcement for noncompliance as outlined in City code chapters 1.12 & 8.28.

### Documentation:

Clear documentation of each inspection, including dates, times, observations, and any non-compliance based on the Post-Construction BMP Maintenance Checklist shall be kept in the Engineering Division's ADEQ files.

### Photo Documentation:

Encourage the use of photos to document conditions both before and after any corrective action.

### 5. Non-Compliance:

Notification: The Engineering Division will notify Code Enforcement in writing
of the non-compliance The notice will outline the corrective actions necessary
to bring the post-construction facility into compliance.

- Initial Contact and Education: Code Enforcement will create a stormwater case, and the Engineering Division will contact the landowner to educate and try to gain compliance within 7days.
- Corrective Actions: If compliance is not achieved within 7 days of initial
  contact, a voluntary correction notice will be sent to the landowner, requesting
  compliance within 30days. Limited time extensions can be granted for
  completing corrective action if needed.
- Civil Violation and Penalty: If voluntary correction cannot be secured within the allotted time period, then a civil violation and penalty can be issued in accordance with City code chapter 1.12.

### 6. Record Keeping:

 Records of inspections and facilities will be kept in the Engineering Division's ADEQ files.

Maintain easily accessible records for review and audits. Reports will include photos, inspection findings, and required corrective actions for landowners.

### 7. Training:

- Provide educational materials and technical support for landowners at time of permit and at any time during the life of the facility, including at the time of Engineering Division's inspection.
- Provide training to inspectors and other personnel involved in inspection of retention basins and underground retention basins. Training records will be kept in the Engineering Division's ADEQ files.
- Ensure that personnel and inspectors are knowledgeable about the procedures and their responsibilities.
- The Engineering Division will purchase CCTV cameras in 2025 to inspect underground retention basins, ensuring all facilities are assessed for the following annual report.

### 8. Review and Updates:

- Regularly review and updates to the written procedures will occur to ensure they remain effective and relevant.
- Document any changes made to the written procedures.

Storm Water Managmenet Agrreeement/BMP Faciliies Maintenance Agreement

Inspection Date	4/8/2025	4/8/2025	4/8/2025			4/14/2025	4/8/2025	4/8/2025	4/14/2025			4/14/2025	4/14/2025	4/14/2025	4/14/2025	4/14/2025	4/14/2025	4/14/2025	Inspection Date	4/7/2025	4/7/2025	4/7/2025	4/7/2025	4/10/2025	4/1/2025	4/7/2025	4/7/2025	4/7/2025	4/7/2025	4/7/2025	NA		Inspection Date	4/8/2025	4/8/2025	4/8/2025	4/8/2025	4/8/2025	4/14/2025	
BMP Type	Retention Basin	Underground Retention Basin				Retention Basin - Landscaping	Retenton Basin	Retention Basin	Underground Retention	Not Visible	KIDS Playing in field	Not Built- Construction Ongoing	Retention Basin	Retention Basin	Underground Retention Basin	Underground Retention Basin	Underground Retention Basin	Not Built	BMP Type	Retention Basin	Retention Basin	Retention Basin	Retention Basin	Underground Retention	Underground Retention	Underground Retention	Not Constructed		BMP Type	Retention Basin	Underground Retention	Retention Basin	Underground Recention	Not Constructed	Underground Retention	で できないの間にはできないののでいます				
Agreement Date	December 18th	22-May	20-Jan	13-Jan	3-Jul	29-Sep		17-Feb	21-301	28-Jul	28-Jul	25-Jun	10-Jun	Z8-Jun	24 Jun	28-Jul	3-Oct	15-Sep	Agreement Date	9-Sep	14-Jul	1-Sep	8-Oct	3G-Aug	13-Sep	1-Sep	11-Jan	11-Mar	15:Oct	12-May	11-Jan		Agreement Date	3/3/2022	28-Nov	2-Mar	Titreb	11-Jan	5-Apr	
City Permit	21-716	20-1203	20-1886	20-1868	17-2902	21-1035	20-3155	20-2374	21-66	20-3198	20-3197	20-3173	20-3062	20-3201	19-3298	20-3199	21:1370	21-796	City Permit	21-4963	21-3653	31-3795	21-3232	21-5013	21-5406	21-5061	21-5827	21-3227	21-3021	21-1050	21-5804		City Permit	21-5180	22-2041	21-5731	22-185	18-746	22-1348	21 -011
Pacel Number	114-06-107	109-23-071	104-40-030	106-18-074	115-12-008	21-1035	114-06-210	106-33-005	120-52-001	2226~12~26	2226~12~26	108-06-001	132-00-PRA&B	104-35-023	109-23-050	108-08-166	115-07-028	109-29-017	Pacel Number	114-12-012	104-30-506C	106-32-045C	114-12-026	108-13-071	108-19-003	114-06-068	109-23-059	3093-201-03	114-16-039 8,40	110:09:045	108-19-049		Pacel Number	106-08-041	109-23-056C	106-08-040B	104-40-033	105-03-079	107-07-050	4000 000
Owner	Stephen Palmieri	P+W Investments	Jacob Runchery	Steven Palmiere	RL Wilkins Farms	Amanda Zink	Kevin Barett	Mike Bradley	TyBrann	LHC Unified School District	Jamaica Elementary School	Sam Woods	LHC Unified School District	LHC Unified School District	WozbaniiiC	LHC Unified School District	Jason Fowler	Egido Degisto	Owner	Frank Ortiz	Bennet Family Trust	Sagi Zui Hasson	Stephen Aubert Rock	Sam Woods	Sam Waods	Sam Woods	Seville Builders	Greens Havasu IIIC	Mayerlk, LLC	Surf Thru, inc	Seville Builders Wes Yonda		Owner	Raph Roberson	Nesly Yonda -Seville Builders	Gary Hatch	Paulo Paulgilianti	Jeffrey Gilbert	Jack Dunn MD	513 S C C C C C C C C C C C C C C C C C C
Adress	3424 Oro Grande Blvd.	2094 Swanson Ave	2820 Palisades Drive	2111 Industrial Drive	1061 N. Lake Havasu Avenue	2581 Kiowa Blvd	3430 Kearsage Drive	1720 Acoma Blvd W.	85 Retail Center Drive	Havasupai Elementary - 880 Cashmere Dr	3437 Jamaica Blvd South	2015 Moyo Drive	2675 Palo Verde Blvd South	Natilus Elementary - 1425 Partricain Drie	2042 Swanson Ave	2395 N. Smoketree Ave	1050 Aviation Ave	337 Lake Havasu Avenue	Adress	1135 Rolling Hills Drive	2544 Hillview Drive	2110 Holly Drive	3556 Kearsage	2441 McCulloch Blvd N	2501 McCulloch Biodin	3448 Ora Grande Blvd	2080 Swanson Ave	120 Park Ave, LHC, AZ 86403	2660 Sweetwater Ave	530 N. Lake Havasu Avenue	2825 Bluewater Drive		Adress	2530 Palo Verde Blvd S	2060 Swanson Ave	2520 Palo Verde Blvd South	2685 Palisades Drive	3497 McCuloch Blvd N	200 London Bridge Road	4 - 4 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
Fiscal Year	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	Fiscal Year	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	Fiscal Year	2022	2022	2022	2022	2022	2022	0000

2022	2198 McCulloch Blvd N	Benchmark tHC-Properties	108-2-162A	22.835	31-Mar	Underground Retention	4/8/2025
2022	145 Park Avenue	(C2LH)	107-78-004	22-2089 & 90	14 Oct	Underground Retention	4/8/2025
2022	3204 Sweetwater Ave	Luxe Locker	114-20-0948	22-2679	12-Dec	retention Basin	4/8/2025
2022	2132 Moya Drive	Theshowmustgoon, LLC -Jose Moran	108-06-146	22-2173	7.Dec	Underground Retention	4/14/2025
2022	1641 Mesquite	Lois Rowe	107-08-019	21-4041	18-Apr	Retention Basin	4/10/2025
2022	5020 Whelan Drive	Lake Havasu Partners LLC	120-57-004C	21-6281	19-Jan	Retention Basin	4/10/2025
2022	6535 Showplace Ave	BIII Gand Larry G Inversments, LLC	120-55-007	22-3256	30-Aug:	Underground Retention	4/14/2025
2022	2820 Palisades Drive	KTW Investments	104-40-029	22-3338	22.5ep	Underground Retention	4/10/2025
Fiscal Year	Adress	Owner	Pacel Number	City Permit	Agreement Date	BMP Type	Inspection Date
2023	2510 Kiowa Blvd N	Timothhy Tuan Dan	104-03-022	22-4069 & 70	7-Feb	Not Constructed	4/10/2025
2023	395 El Camino Way	1212 Enterprises LLC	107-16-026	22-316	25-Apr	Retention Basin	4/10/2025
2023	1690 Industrial Blvd	Mike Bradley	106-24-046A	22-1979	5-May	Underground Retention	4/10/2025
2023	2661 Tonto Drive	Gall Hardwood	109-27-019	22-4528	30-Nov	Underground Retention	4/10/2025
2023	2400 Clubhouse Drive	Jeff Gilbert	105-14-033A	22-4732	Sylul	Under Construction	4/10/2025
2023	1740 Bahama Ave	Anthony Michael Cirocco	106-18-023	21-6187	16-Feb	Underground Retention	4/10/2025
2023	1509 El Camino Drive	Danny Sheviski	2194-92-1-3	23-4444	21-Jun	Retention Basin	4/10/2025
2023	1930 Pirate Lane	American Land Development Corp	106-18-052	22-4196	20-Mar	Retention Basin	4/10/2025
2023	6534 Showplace Ave	BIII G and Earry G Invesments	120-55-00SA	22-3562	26-Jan	Underground Retention	4/14/2025
2023	2232 Sandwood Drive	Linda Vasquez	104-47-119	73:87	7-Mar	Underground Retention	4/14/2025
Fiscal Year	Adress	Owner	Pacel Number	City Permit	Agreement Date	BMP Type	Inspection Date
2024	2640 Palo Verde Blvd S	ABC Lands Corp -Gary Hatch	106-08-058	BP24-00498	28-Oct	Under Constrution	4/10/2025
2024	1800 Victoria Farms Road	CP LHC DEV 1, LLC	120-03-060	8P24-00795	1-0ct	Underground Retention	4/14/2025
2024	1580 Dover Ave	Paradyme Investments, LLC	115-07-081	23-3212	8-May	Under Constrution	4/10/2025
2024	481 Lake Havasu Ave North	Nets Anderson	107-28-031	23-3155	175-Juni	Under Construction	4/14/2025
2024	3377 Maricopa Ave	Johnnie Mathiasen	114-06-232B	24001386	1-Oct	Under Constrution	4/10/2025
2024	2894 Jamaica Blvd	Stefan & Meagan Pena	105-15-113D	23-3836	18-Jul	5555	
Fiscal Year	Adress	Owner	Pacel Number	City Permit	Agreement Date	BMP Type	Inspection Date

### Appendix L – Construction Site Inspections & Procedures for Erosion Control Inspections



### Procedures for Enforcing Sediment and Erosion Control Measures

Lake Havasu City Engineering Division's goal is to effectively enforce sediment and erosion control measures, establish a clear written procedure for the City's site inspections, outlining responsibilities of City and Contractor/Developer, City inspection frequency, City documentation requirements, and enforcement actions for non-compliance.

### 1. Purpose and Scope:

- To ensure compliance with erosion and sediment control plans and to protect water quality and the environment.
- Inspect all sites greater than 1 acre for sediment and erosion control measures within the city limits with a minimum of quarterly inspections or after a rain event.

### **Roles and Responsibilities:**

- Inspector: The Engineering Division will provide Storm Water Inspectors
   Trained and Qualified for reporting to The Engineering Division Manager and
   the Stormwater Engineer.
- **Contractor/Developer:** Who is responsible for implementing, inspecting and maintaining erosion and sediment control measures.
- Authority: Code Enforcement has the authority to stop work as directed by the city engineer.

### 3. Inspection Frequency and Timing:

- Inspection shall be done quarterly at minimum or within 7 days of a recent rainfall event.
- All other sites that drain to an ephemeral wash or public right of way under the supervision of an Arizona Registrant may be inspected every 6 months. The owner or operator shall comply with erosion and sediment control measures.
- Compliance with the ADEQ permit requires all 80% of scheduled inspections.

### 4. Inspection Procedures:

### · Checklist:

Develop a detailed checklist to ensure all aspects of erosion and sediment control are inspected.

### Documentation:

Require clear documentation of each inspection, including dates, times, observations, and any non-compliance found. Site Inspection reports to be filled on the Site Inspection Report Template.

### Photo Documentation:

Encourage the use of photos to document conditions both before and after any corrective actions.

### 5. Non-Compliance and Enforcement:

- Notification: Establish procedures for notifying the contractor/developer of any non-compliance. The contractor will be notified in writing by the city engineer and or code compliance with corrective actions required to fix the Best Management Practice.
- Corrective Actions: Outline the required actions to address non-compliance for the repair erosion control measures, implement additional controls to be fixed within a 7-day period notified in writing.
- **Stop-Work Orders:** A stop work order will be issues from the city engineer 7 days after the site is determined non-compliant in writing.
- Penalties and Fines: Penalties will be issued at the discretion of the city engineer or for repeated or serious violations. Refer to city code section 8.28 for enforcement policies.

### 6. Record Keeping:

- Records of Inspections will be kept in the ADEQ folder on the A drive by using the sight inspection report template.
- Ensure that records are readily accessible for review and audits. Reports will include pictures and inspection reports with corrective actions required of the contractor.

### 7. Training:

- Provide training to inspectors and other personnel involved in erosion and sediment control. Records will be kept in training folders under the ADEQ folder.
- Ensure that personnel are knowledgeable about the procedures and their responsibilities.

### 8. Review and Updates:

- Regularly review and update the written procedures to ensure they remain effective and relevant.
- Document any changes made to the procedures.

### **Building Permit**

Priority	High	High	High	High	Normal	Normal
UpdatedBy	Jeanette Nutt	Debbi Nyland	Steve Blake	Debbi Nyland		Jeanette Nutt
Changed	11/12/2024	11/13/2024	09/27/2024	08/08/2024	08/28/2024	11/09/2024
Created	10/16/2024	08/13/2024 11/13/2024	07/23/2024	07/10/2024	05/28/2024	05/23/2024
Description	COMMERCIAL GRADING	GRADING FOR RIVIERA POOL	Commercial Grading	*AT-RISK GRADING*	GRADING FOR SHOWPLACE SHELL BLDG "B"	GRADING
Primary Contact	Oxley Construction LLC	RAGING RIVER MANAGEMENT CORPORATION	sam@builtwellaz.com	1191 LAKE HAVASU LLC	BILL G & LARRY G INVESTMENTS	MR BUILD HOME IMPROVEMENT
Мападег	Kristin Warren	Kristin Warren	Sylvia Butch	Sylvia Butch	Steven M. Blake	Sylvia Butch
Location	1191 LAKE HAVASU AVE N, Lake Havasu City, AZ 86404	2267 MARINA VIEW WAY, Lake Havasu City, AZ 86406	3377 MARICOPA AVE, Lake Havasu City, AZ 86406	1191 LAKE HAVASU AVE N, Lake Havasu City, AZ 86404	6535 SHOWPLACE AVE, Lake Havasu City, AZ 86404	1760 BIMINI LN, Lake Havasu City, AZ 86403
Туре	Grading	Grading	Grading	Grading	Grading	Grading
Status	Issued	penss	Issued	penss	penss	Issued
Record #	BP24-01115	BP24-00574	BP24-00421	BP24-00304	22003257 CGRD	24001626

Priority	Normal	Normal	Normal	Normal	Normal
UpdatedBy	Sylvia Butch	Steve Blake	Sylvia Butch	Jeanette	Sylvia Butch
Changed	08/27/2024	10/01/2024	07/19/2024	07/02/2024	07/24/2024
Created	05/13/2024 08/27/2024	04/04/2024	12/28/2023 07/19/2024	11/17/2023	11/03/2023
Description	El Paraiso Commercial Grading	GRADING IN PUE	Commercial Grading	COMMERCIAL GRADING FOR EZ BOX STORAGE	FINAL GRADING FOR HARGREAVES METAL WAREHOUSE BLDG
Primary Contact	TR ORR INC	DEVELOPMENT, LLC	Abco Builders Inc	ANDERSON, NELS	Melissa
Manager	Steven M. Blake	Debbie L. Nyland	Sylvia Butch	Steven M. Blake	Kayleen Thomas
Location	1530 PALO VERDE BLVD S, Lake Havasu City, AZ 86403	Grading   Lake Havasu City, AZ 86403	2894 Jamaica BLVD S, Lake Havasu City, AZ 86406	481 LAKE HAVASU AVE N, Lake Havasu City, AZ 86403	2995 Kiowa BLVD N, Lake Havasu City, AZ 86404
Туре	Grading		Grading	Grading	Grading
Status	Issued	penss	įssned	ssued	Issued
Record #	23003507 CGRD   Issued	24000924 RGRD	23003836	22003156 CGRD	23001871 CGRD

### SWPP INSPECTION SPEADSHEET

Adress of SWPP	Contractor	Inspection Date	Inspector	Corrections	Re-Inspection Date	Notes
				Initial Grading Compileted. Curb Inlet Protection/Straw Wattle		
40 Retall Center Orive Lake Havasu City	Ploneer Earth Movers	2/12/2025	Matt Thomas	Perimeter/Rip Rap Stope Protection	¥	NA
80 Retail Center Drive	Paradyme Storage	4/24/2025	Matt Thomas	Retention Basin Exceeded Minimum Expecatiations	NONE	NA
111 Bunker Drive	Pat Burns Construction	2/25/2025	Matt Thomas	Initial GradInding Inspection completed. Straw Waddle Perimeter, Conc. Washout, Portable Tollet.	3/4/2025	All Deficiences Corrected
130 Park Ave	Not Listed	3/11/2025	Matt Thomas	initial SWPP, Contractor Correcting Track Out and Waddle Perlmter	ž	
881 Bryce CT	Not Listed	4/24/2025	Matt Thomas	Contractor requires constrction entrance and perimter controls		
1191 Lake Havasu Ave	Not Listed	2/4/2025	Matt Thomas	Requires Construction Entrance and Perimter Controls	3/11/2025	All Deficieclences Coffected
2030 Swanson	Not Listed	3/28/2025	Matt Thomas	Grading Without a Permit - Issued Code Violation	¥	
				Initial Grading Completed. Permiter controls and construction		
2070 Klowa	Inter Tech Construction Sunland	3/11/2025	Matt Thomas	entrance in place.		
				Initial Grading Completed. Permiter controls and construction		
2160 Swanson Ave	Pat Burns Construction	2/12/2025	Matt Thomas	entrance in place. Needs concrete wash out.	NA.	
				No Permiter Controls, Construction Entrance, Porta Potty,		
2405 Victoria Farms Road	Inter Tech Construction Sunland	2/25/2025	Matt Thomas	Concrete Washout	3/11/2025	All Deficieciences Corrected
107-83-100A Herritage Homes	Not Listed	274/2025	Matt Thornas	Laciding Construction Entrance and Perimter Controls		
				Construction Entrance Established, Perimeter Controls. Additional		
Rivera 6 & 7	Desert Land Group	5/5/2025	Matt Thomas	Sitt Fencing Installed at high risk areas	NA AN	
				Access Road with Straw Waddle Perlmeter. Areas of concentrated		
				tiow being evaluated for BMP upgrades to Silt Fence. Engineers		
Rivera Phase 8	Desert Land Group	7/8/2025	Matt Thomas	updating plan	W	
				Straw Waddle Perimiters, Inlet protection, construction entrance		
Cordon Palms	MAC IRIS	11/7/2024	Matt Thomas	established for track in and out.	NA A	
Trinity	OXIEY	11/22/2024	Matt Thomas	Staw Waddle Permimeter, Contractor Requires Washaut	AN.	

\*\*\* Follow up inspections are followed up quarterly and upon completion of project \*\*\*\*\*