

SONOMA DEVELOPMENTAL CENTER STORM WATER MANAGEMENT PROGRAM ACTION PLAN 2006

Sonoma Developmental Center
Department of Developmental Services
15000 Arnold Drive
Eldridge, CA 95431

FACILITY DESCRIPTION

Sonoma Developmental Center is a state owned, residential facility for developmentally disabled clients. It has been utilized for this purpose in this location for the past one hundred and eight years. It is located on 1253 acres in Sonoma County. Its current population is 768 clients and operates 24 hours a day 365 days per year. The facility employs 2200 employees.

I. BACKGROUND

Runoff from storms is part of the natural hydrologic process. Rainwater that does not infiltrate into the ground flows by gravity into water bodies such as Asbury and Hill creeks and flows to Sonoma Creek. Storm water flows at Sonoma Developmental Center are highly seasonal with more than 95% of the annual runoff occurring during the winter rainy season between November and April. Impervious surfaces increase the volume and velocity of storm water runoff. Storm water runoff carries a wide range of pollutants including sediment, nutrients, pathogens, trash and debris and petroleum hydrocarbons. Storm water runoff does not originate from a distinct "point" source (e.g. a sanitary sewer treatment plant outfall or industrial facility); rather, it is considered a nonpoint source pollution.¹ Nonpoint sources (NPS) of pollution originates from runoff from lawns, streets, and water shed. Scientific evidence shows that although huge strides have been made in cleaning up major point sources of pollution, our precious water resources are still greatly threatened by polluted runoff from nonpoint sources. In fact, the 1994 National Water Quality Inventory Report to Congress states that nonpoint sources of pollution are the leading cause of impairment in our Nation's rivers and streams.

In 1972, the Federal Water Pollution Control Act (also referred to the Clean Water Act (CWA)) was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added §402(p) that established a framework for regulating storm water discharges under the NPDES Program. Subsequently, in 1990, the United States Environmental Protection Agency (U.S. EPA) promulgated regulations for permitting storm water discharges from industrial sites (including

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construction sites that disturb more than five acres) and from municipal separate storm sewer systems (MS4s) serving a population of 100,000 people or more. These regulations, known as Phase I regulations, require operators of medium and large MS4s to obtain storm water permits.

In May of 1999 the USEPA approved the 1998 California 303 (d) List and Total Maximum Daily Load (TMDL) Priority Schedule and listed Sonoma Creek as a medium priority. Pollutants listed for Sonoma Developmental Center are:

- Nutrients, medium priority, source-agriculture, construction/land development, urban runoff/storm sewers.
- Pathogens, medium priority, source-agriculture, urban runoff/storm sewers
- Sedimentation/Siltation, medium priority, source-agriculture and urban runoff/storm sewers.

The above list will be used to target these specific water quality concerns as the SDCSWMP program is further developed.

On December 8, 1999, U.S. EPA promulgated regulations, known as Phase II, requiring permits for storm water discharges from small MS4s and from construction sites disturbing between 1 and 5 acres of land.

Sonoma Developmental Center is applying for the Phase II permit April 15, 2005. To meet the requirements of the NPDES Phase II regulations, Sonoma Developmental Center will implement a program to reduce storm water pollution. On May 26, 2005 Sonoma Developmental Center was redesignated as a "Non- traditional MS4" by Bruce Wolfe, Executive Officer, State Water Resources Control Board, and San Francisco Bay Region. The local program will be largely focused on in-house operations including, education, any construction and post-construction, illicit discharge detection and elimination efforts, and Facility maintenance activities.

II. EXISTING WATERSHED ACTIVITIES

The following is a summary of programs and activities that are protecting and improving water quality at Sonoma Developmental Center. The stakeholders in these programs and activities are staff, clients who reside at the facility and their families, surrounding community members, and the public at large.

PUBLIC EDUCATION AND OUTREACH

Presentations/ publications

- All new employees must attend a presentation on hazardous materials and storm water. This New Employee Orientation is a 2-week program and new employees must attend this training before beginning work. There is a 1-hour class during this orientation, which discusses hazardous materials, MSDS

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sheets and storm water. An attendance sheet is kept and the training is tracked by computer to assure all staff receives the training.

- The campus has a closed circuit television station that will run videos on storm water education.
- Educational e-mails will be sent out to all staff monthly.
- The campus newsletter will publish ads weekly.

Community Events

Earth Day

Sonoma Developmental Center Staffs a booth at the annual Earth Day/ recycling events held at the facility. The purpose of the booth is to provide information on the proper disposal of household hazardous waste and used oil, general recycling practices, and composting of yard waste. The targeted audience is SDC staff and Clients family members. We also welcome members of the surrounding community. Sonoma Ecology Center Water Shed group is invited to attend. Sonoma County Water Agency also participates.

Wellness Fair

Sonoma Developmental Center staffs a booth at the annual Wellness Fair. The purpose of the booth is to provide information on new environmental issues, proper disposal of household hazardous waste and used oil, general recycling practices, and composting of yard waste. The targeted audience is SDC staff and Clients family members. We also welcome members of the surrounding community. Sonoma Ecology Center Water Shed group is invited to attend. Sonoma County Water Agency also participates.

In 2004 this event was used to get a survey completed on storm water and environmental issues by everyone who attended.

Used Oil Recycling/ Hazardous Waste Program

Sonoma Developmental Center has a program to pick up and recycle all oil and oil filters generated on the campus by the facilities Plant Operations staff and our motor pool. The targeted audience is SDC staff who may work on equipment and vehicles such as the landscaping department and the motor pool staff. The campus has a comprehensive hazardous materials program and one employee who does the recycling and disposal of all waste generated at the center.

Sonoma Developmental Center/Ecology Center Partnering

Sonoma Developmental Center provides offices and laboratories to Sonoma Ecology Center, Watershed at a reduced rate. In return the Sonoma Ecology Center is developing a base line document of undeveloped land at the center. They are providing the center with a runoff analysis of rainfall, an analysis of water use, and wastewater generation. They are designing landscaping plans to decrease water consumption, and they are creating a GIS/CAD map of the facility.

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PUBLIC INVOLVEMENT/PARTICIPATION

Storm Drain Stenciling Program

Sonoma Developmental Center has had a stenciling program in place for several years. All storm water inlets and basins have been mapped and numbered. The local Boy Scout troops stencil the inlets and basins for the facility every three years. Each participant earns his scouting environmental badge for helping.

Public Surveys

A survey was completed as a baseline on October 16, 2004. The survey was distributed at a public event. Persons completing the survey were entered in a drawing for prizes. 300 surveys were completed. The results on an average were 59% of the questions were answered correctly. A resurvey was completed April 12, 2005. Only 126 participants and the results was an average of 76% of the questions answered correctly. The demographics of Sonoma Developmental Center, as a sole proprietor, are very clear. Stakeholders have been identified as staff and the ethnic make of our clients, family members and staff are documented and surrounding community has been determined.

CONSTRUCTION SITE RUNOFF CONTROL

Sonoma Developmental Center is a non-traditional Small facility, which is comprised of a campus of residential living units and ancillary buildings. This facility has been in place for over 100 years. During that time the population has been decreasing and is currently the lowest in its history. In the past there had been a few complaints that Sonoma Developmental Center had engaged in activities on the property that had a negative impact on Sonoma Creek and any future activities will not be allowed or tolerated. No major construction is planned at this facility and we do not foresee any construction that would involve an acre of property at anytime. We do want to enforce best management practices during any size of construction that the facility may require. As a state agency, no construction can be done on our property without a contract and the State overseeing all construction on state property and contract verbiage has been changed. Verbiage has been added to Sonoma Developmental Center's contracts, which will cover our storm water plan.

- The contractor must submit a storm water drainage plan and a list of all best management practices to be used during the project if any ground or vegetation is disturbed. No construction shall be allowed for disturbing 1 acre or more or shall be within 1000 yards from Sonoma Creek without a complete

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assessment from Plant Operations and submittal of the plan to the Department of General Services for approval. All plans must be according to best management practices and meet all requirements as stipulated in the Clean Water Act. (SDC does anticipate any work done on or near Sonoma Creek in the future).

- The contractor must implement BMP's listed in its drainage plan or any other BMP's that effectively prevent erosion and contain sediment. All of the contractor's employees shall be trained in these practices. BMP's shall be in place in the event of rain.
- All erosion and sediment control materials shall be stored on site, ready for use. All construction materials that could cause water pollution (i.e. motor oil, fuels, paint, discarded building materials, concrete truck washout, chemicals, litter and sanitary waste. etc.) shall be stored and used in a manner that will not cause any pollution. All waste material shall be removed and disposed of at an approved disposal site. All construction debris is to be recycled and proof of recycling must be submitted to SDC, Plant Operations.
- Any spill of a potentially hazardous material shall be reported to the facility Fire Department via the switchboard operator at (707) 938-6000.
- All construction activities shall be performed in a manner that minimizes, to the maximum extent practicable, any pollutants entering directly or indirectly the storm water system or ground water. The contractor shall pay for any required cleanup, testing and administrative costs resulting from consequence of construction materials entering into the storm water drainage system.
- Contractor shall mark all new storm drain inlets with permanent markings, which state "No Dumping—Flows to Creek." This work shall be shown on improvement plans.
- Hydro seeding of all disturbed slopes shall be completed by October 1; Contractor shall provide sufficient maintenance and irrigation of the slopes such that growth is established by November 1. All erosion and sediment control must be installed properly and remain in place until vegetation is established.

MAINTENANCE OPERATIONS

Outfall Mapping

A map of the outfalls has been developed.

Storm Drain System Mapping

A map of the storm drain system has been developed to help insure proper maintenance, insure cleaning and monitoring and to help prevent illicit discharges.

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Street Sweeping

Street sweeping is done on a scheduled rotation basis. All streets are swept before the first rain of the season and done on an “as needed” basis during the months of October through January to enhance drainage and improve safety. A log of areas swept shall be maintained.

Storm Drain Maintenance

The Sonoma Developmental Center maintains over 244 drainage inlets and 6 miles of storm drainpipes. Storm drain inlets and catch basins are numbered and cleaned out before the onset of the wet season. Problem inlets have been identified and a preventative maintenance log shall be maintained. Cleaning is done manually and by using vacuum hoses from the street sweepers. All landscape staff have zones on the campus to maintain and all inlets and basins are checked monthly and whenever necessary during winter months.

Litter Control

Sonoma Developmental Center is a facility for the developmentally disabled. Due to the unusual type of facility we have policies in place, which addresses litter and cigarette butts being placed on the ground. Some developmentally disabled persons may ingest foreign objects so we must keep our facility as clean as possible. Landscape staff maintains the streets and gutter areas. A janitorial contractor maintains all areas within 10 feet from the buildings and the facility has a training program for the clients who live here. This training program teaches our clients to do litter cleanup throughout the facility and receive pay for it.

Public building

Sonoma Developmental Center does not permit smoking in any buildings or within 20 feet from any doorway. The facility provides every building with tamper proof ashtrays. Our janitorial contractor cleans these ashtrays and checks the area for cigarette butts on the ground.

Weed/Pest Control

Sonoma Developmental Center is a facility for the developmentally disabled. Some developmentally disabled persons may ingest foreign objects and plant materials. We do not use pesticides that may pose a hazard to our clients and we do not utilize fertilizers. The only non-hazardous pesticides used contain only a “Caution” label, for use in limited areas only. Sonoma Developmental Center employs a certified Pest Control Technician, who determines what pesticides will be used and evaluates the alternatives. Lower-strength pesticides are used whenever possible. Pesticides are stored at vector control building, which provides double containment. A log of Pesticide and Herbicide spraying is maintained by the facility and MSDS sheets on all products are maintained.

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Transportation

Sonoma Developmental Center's clients are unable to drive, so our clients and our staff utilize campus trams, several buses and vans. Car washing is not allowed on the property.

WATERSHED

Sonoma Developmental Center has 1253.9 acres and water shed rights to another 450 acres currently deeded to Open Spaces and Parks And Recreation. The facility has developed only approximately 20 acres of the property. Of the undeveloped property, 97% is on the east face of Sonoma Mountain. This 97% of property is the facility watershed and must remain undeveloped to continue to provide watershed. Sonoma Developmental Center has 2 lakes; the upper one, Fern Lake is located on the face of the mountain. The runoff is diverted into Fern Lake along with some spring water diversion. When Fern Lake nears capacity the water from it is gravity fed to Suttonfield Lake on the valley floor. These lakes are the holding ponds for our water treatment plant. The runoff that is not diverted to the lakes, flows into 2 seasonal creeks, Asbury and Hill Creeks, both of which flow into Sonoma Creek. Sonoma Developmental Center's water treatment plant operator inspects the creek beds during dry seasons for debris or erosion and any needed maintenance he may find. Sonoma Ecology Center monitors our streambeds for us throughout the year.

III. ADMINISTRATION, PLANNING, AND FUNDING

Sonoma Developmental Center Program Structure

Program Administration

The facility Administrative Director will oversee the program with the Chief of Plant Operation III, designated as the direct supervisor.

Staffing

Sonoma Developmental Center's Plant Operations shall develop the plan and will:

- Coordinate implementation of BMP's in the SWMP.
- Maintain communications with Bay Area Water Resources Management Board and other county agencies.
- Coordinate an internal annual program review.
- Compile information for the annual report.
- Review and approve projected activities and budget for the upcoming year.

Program Structure

Public Education and Outreach

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Sonoma Developmental Center will continue to have committees who will focus on public education, and environmental issues at the facility and will distribute educational material related to water pollution prevention. These committees will consist of Recycling Committee, Health and Safety Committee, and the Wellness Committee. These committees shall be comprised of a member from Plant operations, Health and Safety office, and a representative from each program/department. These committees will focus on employee participation in Environmental events and shall increase public involvement.

Community Involvement/Participation

Sonoma Developmental Center will develop policies and best management practices will include community participation. We continue to involve volunteers such as the boy scouts and girl scouts to participate in our storm drain stenciling and creek cleanup activities. Community involvement shall also include Staff and clients of Sonoma Developmental Center. Participation in community events will be encouraged. Minutes from the above listed committees are public knowledge and are distributed for Staff input.

Funding

Sonoma Developmental Center is a state agency and all funding is through the General Fund, State of California.

Illicit Discharge Detection and Elimination - The Fire Department and the facility Hazardous Materials person takes the lead in responding to hazardous spills for cleanup when required. Our landscape and plumbing staff will also be trained to recognize, report, and respond to illicit discharges during their daily activities. The response will include providing educational materials to violators. Should the illicit discharger be an employee of the facility, progressive discipline shall be initiated as per Policy. Disciplinary action could include written disciplinary action up to and including dismissal.

Construction Site Runoff Control and Post-Construction Stormwater Management

A policy is being written which addresses the contract verbiage to make contractors responsible for best management practices when any vegetation or soil is disturbed.

Pollution Prevention/Good Housekeeping in Daily Operations – Plant Operations will develop and implement the SWMP related to building maintenance, street maintenance, storm drain maintenance and recycling. Plant Operations and the Health and Safety Office shall oversee that storm water management practices are followed in relation to a spill cleanup. Sonoma Developmental Center's Fire Department will take the lead on hazardous spills and will contact Sonoma County Office of Emergency Services for assistance as needed.

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IV. GEOGRAPHIC LAND USE DESCRIPTION

Sonoma Developmental Center is a 1253.9-acre state facility, which is the home for 768 developmentally disabled clients. The facility was constructed beginning 1892. 97% of the acreage is undeveloped rural open spaces. It is located in the Valley of the Moon, with 97% of the acreage on the eastern face of Sonoma Mountain. There are 2 seasonal creeks which flow from upper Sonoma Mountain down to the valley floor at which point they flow into Sonoma Creek. The facility completed a major project in 1986 to separate the storm drain system from the sanitary sewer. The storm drain system has over 244 inlets. The campus is situated on approximately 20 acres on the valley floor. Arnold Drive and Sonoma Creek pass through the center of the campus. The facility has 135 structures; 29 of the structures are private residences, storage sheds, and cardboard and paper recycling workshop and barns in the outlying areas. The facility does have a petting farm which house 21 small animals. This petting farm has a concrete composting site, which composts all barn cleanout and waste. This compost is recycled and the only waste that is not used is a small amount of liquid leachate, which is diverted to sanitary sewer.

The facility has 2200 employees, 768 residential clients and 10 private homes. There is no agriculture on the facility and no plans for future development.

V. POLLUTANTS OF CONCERN

In May of 1999 the USEPA approved the 1998 California 303 (d) List and Total Maximum Daily Load (TMDL) Priority Schedule and listed Sonoma Creek as a medium priority. Pollutants listed for Sonoma Developmental Center are:

- Nutrients, medium priority, source-agriculture, construction/land development, urban runoff/storm sewers.
- Pathogens, medium priority, source-agriculture, urban runoff/storm sewers
- Sedimentation/Siltation, medium priority, source-agriculture and urban runoff/storm sewers.

VI. STORM WATER MANAGEMENT PROGRAM

SWMP - OVERVIEW

Implementation of the Storm Water Management Program (SWMP) is conducted through Six Program Elements: Public Education and Outreach, Public Involvement/Participation, Illicit Discharge Detection and Elimination, Construction Site Runoff Control, Post-Construction Runoff Management, and Facility Operations.

The Implementation Plan for each Program Element is contained in this plan, which provides a description of each Program Element's activities/BMPs, a plan for implementation, quantifiable targets to evaluate performance and effectiveness, pollutants and target audience addressed, and the implementers for each activity.

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Measurable goals are provided for those activities/BMPs that are quantifiable and predictable. These quantifiable targets will be used to demonstrate Sonoma Developmental Center's commitment to the Program and achievement of a reasonable level of implementation.

Performance measures (P) are intended to describe the level of effort and involve enumeration of activities or the number or percentage of participation in a program activity. Examples of performance measures include the number of public events attended, training sessions conducted, and number of construction sites inspected. This information is used by staff for purposes of planning and scheduling resources required to conduct the SWMP.

Effectiveness measures (E) provide assessments of the degree to which activities reduce pollutants to the maximum extent practicable (MEP). This information is used to focus and modify activities to maximize environmental benefits. Effectiveness measures include quantifying the effectiveness of a particular effort; for example, the percentage of construction sites in compliance with water quality laws. In some cases, effectiveness measures can be used to directly assess an activity's environmental benefit. For example, measuring the amount of pollutants removed by a street sweeping is a measure of pollutants that would have otherwise been discharged downstream to a local creek.

The results of these effectiveness evaluations, including performance and effectiveness measures, will be provided in the Annual Progress Reports, submitted in September. The Annual Progress Reports will quantify the previous fiscal year's efforts (where possible), including BMPs and tasks implemented and the performance and effectiveness of activities. This annual evaluation will assess how well the SWMP goals were achieved and whether the measurable goals were accomplished. Activities and specific BMPs may also be modified, added, or deleted as needed to meet Program Element goals.

PUBLIC EDUCATION AND OUTREACH / PUBLIC INVOLVEMENT ELEMENTS

A. Element Overview

Sonoma Developmental Center's goal for the Public Education and Outreach Element is to generate awareness of stormwater pollution prevention by educating Staff, Clients, Client's families, and surrounding community about the storm drain system and it's relationship to the health of local waterways. We hope to change behavior patterns through education and encouragement of active participation in water pollution prevention. Being a very small facility our Public Education and Outreach program is combined with our public involvement as they intermingle.

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B. Strategy

Build and nurture relationships and partnerships with our clients, their families, the community and our staff, stakeholders and expand resources; provide educational tools for the next generation to understand stormwater issues. Persons who have concerns can file a complaint with Sonoma Developmental Centers Public relations person at (707) 938-6703.

C. Pollutants Controlled/Addressed

Sediment, nutrients, pathogens, metals, pesticides, vehicle waste products, organic carbon, oil and grease, and various non-stormwater discharges.

D. Activities/Best Management Practices

Newsletter and Flyers

Sonoma Developmental Center has a weekly newsletter that goes out to all staff. The facility also has a newspaper, which goes out to all of our client's family members monthly. We also have a very good network of e-mail systems. Flyers and notices go out to all employees on a regular basis.

Storm Drain Stenciling/Community Involvement

Continue to solicit the Boys and Girls Scouts volunteerism to stencil storm drains. Sonoma Valley Ecology Center Water Shed Section is housed here on the campus and has partnered with Sonoma Developmental Center

Community Events

The facility will continue to have four to five events per year. Outreach at these events will include activities and demonstrations, conducting surveys, and handing out educational materials to educate the public on how stormwater becomes contaminated with pollutants and harms aquatic life. At these events we also invite outside agencies to participate. The local water districts, P.G. & E. and Sonoma Ecology Center Water Shed are some of these participants.

Business Practices

Our Landscape Department will continue to be a model for good storm water practices by following the storm water policies. Training has been completed in this area.

Effectiveness Evaluation

Characterize Stake Holders, public and Staff; Baseline their knowledge.

- Survey has been conducted (P)
- Number of responses tracked (P)
- Determine level of understanding: storm water and waterways (E)
- Re-survey annually to determine improved understanding (P)
- Review survey results (P)

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- Storm water flyer/ newsletter (P)
- Weekly bulletin announcements (P)
- Number of articles in the Eldridge Gazette (P)
- Number of e-mails sent out to all staff (P)
- Number of hits to SDC web page (P)
- Number of volunteers/groups recruited (P)
- Number of storm drains stenciled (P)

Community events:

- Number of events annually (P)
- Number of participants (P)

Business practices:

- Protocols will be established (E)
- Number of staff receiving training (P)

ILLICIT DISCHARGE DETECTION AND ELIMINATION ELEMENT

A. Element Overview

The goal of the Illegal Discharge Element is to prevent pollutants that are intentionally poured, dumped, discharged, or accidentally spilled into the facility drainage system from reaching waters of the United States.

B. Strategy

Develop the Public Education and Outreach Element by working with other agencies to educate staff, clients, client's families and surrounding community about proper waste disposal alternatives. Maintain adequate measures for reporting spills; spill response, investigation, and cleanup.

C. Pollutants Controlled/Addressed

Sediment, waste oil, paint, concrete, other non-stormwater discharges.

D. Activities/Best Management Practices

Spill Response Structure

Establish a structure for receiving reports of illicit discharges and develop a response plan for conducting elimination, clean up, and follow-up of illicit discharges. Reports of illicit discharge can be made to: Sonoma Developmental Centers Public relations Officer (707) 938-6703, to facility telephone operator, (707) 938-6000, SDC fire Department (707) 938-6333 or the Health and Safety office (707) 938-6536.

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Staff Training

SDC will train staff to recognize illicit discharges and the procedures for responding to and cleaning up these discharges. The Landscape department has protocols on detecting illicit discharges and how to respond. All new employees must attend a 2 week training on several aspects of the facility before they are allow to begin work. Hazardous materials and storm water management are 2 facets of this training.

Spill Response Structure

- Number of illegal discharges reported via the public (P)
- Number of illegal discharges reported via maintenance staff (P)
- Number of spills responded to, contained, or cleaned up by maintenance staff (P)
- Feedback from staff and the public (E)
- Number or percentage of spills in which the responsible party is identified (P)
- Development and implementation of enforcement procedures and guidance (E)
- Development of database for reported illegal discharges (E)
- Annual analysis of data for types, frequencies, and locations of illicit discharges (E)

Staff Training

- Number of training sessions held and participation (P)
- Number of illegal discharges identified by staff (P)

CONSTRUCTION SITE RUNOFF CONTROL ELEMENT

A. Element Overview

Sonoma Developmental Center is a Non-traditional SM4 facility, which is comprised of a campus of residential living units and ancillary buildings. This facility has been in place for over 100 years. During that time the population has been decreasing and is currently the lowest in its history. No major construction is planned and we do not foresee any construction that may involve an acre of property at anytime. We do want to enforce best management practices during any size of construction the facility may require. So as a state agency, no construction can be done on our property without a contract and the State overseeing all construction on State property and contract verbiage has been changed. Verbiage has been added to Sonoma Developmental Center's contracts, which will cover our storm water plan.

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Our goal in the Construction Element is to reduce the discharge of stormwater pollutants to the maximum extent practicable (MEP) by: requiring any construction to reduce sediment in site runoff and requiring construction sites to reduce other pollutants, such as litter and concrete wastes, through good housekeeping procedures and proper waste management. Excessive erosion and sediment transport can harm creek habitat through both scour and smothering of spawning areas. The Construction Element includes adopting and enforcing policies for erosion and sediment control (ESC), and conducting outreach activities and site inspections.

B. Strategy

As a state agency, no construction can be done on our facility without a contract and the state oversees all contracts on state property. Verbiage has been added to Sonoma Developmental Center's contracts, which will cover our storm water plan. Each contract will have a Project Manager assigned to it. This project manager will be a Supervisor in Plant Operations. This manager will visit the contract site daily to assure the site is secure and is using best management practices.

- The contractor must submit a storm water drainage plan and a list of all best management practices to be used during the project if any ground or vegetation is disturbed. No construction shall be allowed for disturbing 1 acre or more or shall be within 1000 yards from Sonoma Creek without a complete assessment from Plant Operations and submittal of the plan to the Department of General Services for approval. All plans must be according to best management practices and meet all requirements as stipulated in the Clean Water Act. (SDC does anticipate any work done on or near Sonoma Creek in the future).
- The contractor must implement BMP's listed in its drainage plan or any other BMP's that effectively prevent erosion and contain sediment. All of the contractor's employees shall be trained in these practices. BMP's shall be in place in the event of rain.
- All erosion and sediment control materials shall be stored on site, ready for use. All construction materials that could cause water pollution (i.e. motor oil, fuels, paint, discarded building materials, concrete truck washout, chemicals, litter and sanitary waste. etc.) shall be stored and used in a manner that will not cause any pollution. All waste material shall be removed and disposed of at an approved disposal site. All construction debris is to be recycled and proof of recycling must be submitted to SDC, Plant Operations.
- Any spill of a potentially hazardous material shall be reported to the facility Fire Department via the switchboard operator at (707) 938-6000.

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- All construction activities shall be performed in a manner that minimizes, to the maximum extent practicable, any pollutants entering directly or indirectly the storm water system or ground water. The contractor shall pay for any required cleanup, testing and administrative costs resulting from consequence of construction materials entering into the storm water drainage system.
- Contractor shall mark all new storm drain inlets with permanent markings, which state “No Dumping—Flows to Creek.” This work shall be shown on improvement plans.
- Hydro seeding of all disturbed slopes shall be completed by October 1; Contractor shall provide sufficient maintenance and irrigation of the slopes such that growth is established by November 1. All erosion and sediment control must be installed properly and remain in place until vegetation is established.

C. Pollutants Controlled/Addressed

Sediment, nutrients, pathogens, paints, concrete, stucco, litter, and other non-stormwater discharges.

Enforcement

If a contractor is found to have discharged illegally, a letter will be sent notifying the contractor and requesting immediate cleanup. The contractor will be charged for all cleanup and fines that may ensue. Payment of the contract will be withheld.

Should the discharge be by an employee of SDC the facility has a disciplinary process, which would consist of a letter of reprimand up to and including dismissal. This employee will be held responsible for any costs incurred. All SDC employees receive a performance report annually at which time they are required to review and sign the facilities policies.

D. Activities/Best Management Practices

Outreach and Education

Educate and provide guidance to the contractors on Sonoma Developmental Center's policies and new technology and practices. Outreach will occur during contract walk through, pre-construction meetings, boilerplate plans, project manager inspections, etc.

Plan Review Process

Evaluate and revise erosion, sediment, and pollution control standards and specifications, as necessary. These standards will be updated based on the latest technology and practices.

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Ensure projects adequately address erosion, sediment, and pollution control requirements through the development approval process by requiring projects greater than one acre to have an adequate plan.

Inspection Program

Ensure that construction sites adequately address erosion, sediment, and pollution control. Project manager will ensure that control measures and practices are properly implemented, installed, maintained and are effective during the construction of a project, beginning with rough grading and ending with completed construction.

E. Effectiveness Evaluation

The effectiveness of the Construction Element will be based on the level of contractor's compliance with the plans, and the adequacy of Sonoma Developmental Center's procedures for plan check and inspection. In addition to regular plan reviews and construction site inspections reviews of the effectiveness and maintenance requirements of control measures will be conducted regularly.

Outreach and Education

- Required verbiage in contract will be discussed when bid packets are sent out. (E)

Plan Review Process/ Inspection Program

- Number of storm water plans approved (P)
- Number of projects disturbing vegetation or soil (P)
- Number of inspections (P)

POST-CONSTRUCTION RUNOFF MANAGEMENT ELEMENT

A. Element Overview

The goal of the Post-Construction Element is to protect local creeks and rivers by reducing the discharge of storm water pollutants to the maximum extent practicable (MEP) by requiring construction sites to reduce sediment in site runoff and maintain vegetation and preventative measures until they present no further potential for

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polluting. Sonoma Developmental Center wants to assure that contractors have reduced other pollutants such as litter and concrete wastes from the site.

B. Strategy

To adopt a policy which will require the implementation of controls to reduce storm water pollution. To provide assistance and information to our staff and contractors who will be developing the continuing program to insure pollution prevention. Training and awareness are the major factor.

POST-CONSTRUCTION RUNOFF MEASUREMENT CONTROL

C. Pollutants Controlled/Addressed

Sediment, nutrients, pathogens, pesticides, vehicle waste products, metals, organic carbon, oil and grease.

D. Activities/Best Management Practices

Plan Review Process

Evaluate and revise policies, as necessary. Develop procedures include planning practices, site design, (e.g., wet and dry detention basins), source control measures, on-site treatment control measures, and maintenance requirements. These standards will be updated based on new technical information, new innovative technologies, and control measure effectiveness.

BMP Maintenance

Develop and implement maintenance protocols on-site control measures and develop an inspection program to ensure control measures are maintained. Update and maintain record keeping and data management procedures for tracking regional control measures and their maintenance.

Outreach

Conduct outreach to the development community to provide information and serve as a technical resource on policies and new technology and practices. This may be accomplished through presentations and compliance information.

E. Effectiveness Evaluation

The effectiveness of the Element will be based on whether on-site and regional stormwater quality control measures have been designed, constructed, and maintained according to the developed criteria. Maintenance records, inspection records, and visual monitoring will provide verification that the control measures are working.

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Performance and Effectiveness Measures

The following are examples of the types of performance measures (P) and effectiveness measures (E) that may be used to measure the degree of Program Element implementation and activity effectiveness. Performance measures involve enumeration of activities or the number or percentage of participation in a Program activity. This information will be used by staff for purposes of planning and scheduling resources required to conduct the Program. Effectiveness measures provide assessments of the degree to which activities reduce pollutants to the MEP or eliminate non-stormwater discharges. This information is used to focus and modify activities to maximize environmental benefits. The results of the performance and effectiveness measures will be provided in the Annual Progress Reports.

Plan Review Process

- Revisions to the policies (E)
- Number of policies distributed (P)
- Number of projects (P)

BMP Maintenance

- Number of BMP fact sheets and maintenance and operating procedures developed. (P)
- Number of inspections and maintenance activities performed (P)
- Percentage of BMPs adequately maintained. (E)

Outreach

- Feedback from facility staff (E)
- Feedback from contractors (E)

FACILITY OPERATIONS ELEMENT

A. Element Overview

Our facility conducts numerous operational and maintenance activities some of which have the ability to prevent sediment and discharge to the storm water system. Many of these are operational practices and will prevent potential pollutants. Many operational and maintenance activities provide additional benefits of pollution removal.

B. Strategy

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Conduct a facility audit of potential storm water runoff. Maintain awareness levels of staff with continued training. Incorporate storm water awareness into tailgate meetings and on a regular basis in required safety training programs.

C. Pollutants Controlled/Addressed

Sediment, nutrients, pathogens, pesticides, vehicle waste products, metals, organic carbon, oil and grease, paints, concrete, fuels, automotive fluids, litter, other non-stormwater discharges.

D. Activities/Best Management Practices

Street Sweeping

Continue street sweeping programs and evaluate alternative equipment and sweeping schedules to optimize pollutant removal.

Storm Inlets/outflows

Continue maintenance activities that remove accumulated sediment and trash from storm drainage inlets and outflows.

Litter Control

Continue to provide trashcans and garbage pickup in public areas prone to littering. Continue to have Janitorial Service clean around all building. Reinforce the "No Smoking" near doors and "No Cigarettes On Ground" policy.

Corporation/ Landscaping Yards

Identify and characterize non-storm water discharges and describe and implement control measures to eliminate or reduce pollutants to the MEP. Focus on good house keeping in these areas.

Creek and Ditch Maintenance

Develop BMPs for seasonal creek and ditch maintenance and train staff and contractors on the use of BMPs.

Landscape Maintenance

Assess the facility campus regarding erosion, litter, pesticide and fertilizer applications, and other sources of storm water pollution, and develop BMPs and a training program for employees. Encourage more planted, permeable areas.

E. Effectiveness Evaluation

The effectiveness of the Facility Operations Element is dependent on adequate training, resources, and staff to ensure that facility operations are reducing storm water pollution and controlling non-stormwater discharges. Assessments will include evaluation of inspections, improved procedures for managing target pollutants, review of feedback from facility staff, and public comments. Quantitative measurements of effectiveness may include evaluation of sediment removed from sump maintenance and street sweeping as well as estimated reductions in pollutant loadings.

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Performance and Effectiveness Measures

The following are examples of the types of performance measures (P) and effectiveness measures (E) that may be used to measure the degree of Program Element implementation and activity effectiveness. Performance measures involve enumeration of activities or the number or percentage of participation in a Program activity. This information is used by staff for purposes of planning and scheduling resources required to conduct the Program. Effectiveness measures provide assessments of the degree to which activities reduce pollutants to the MEP or eliminate non-stormwater discharges. This information is used to focus and modify activities to maximize environmental benefits. The results of the performance and effectiveness measures will be provided in the Annual Progress Reports.

Street Sweeping

- Frequency and miles swept (P)
- Amount of pollutants removed from streets (E)

Storm Drain Inlets/ Outflows

- Number and maintenance frequency of storm drain inlets/outflows (P)
- Amount of pollutants removed from storm drain inlets/outflows (E)

Litter Control

- Number of cans routinely emptied (P)
- Amount of material removed (P)
- Frequency of overfilled trash cans (P)

Corporation Landscaping Yards

- Compliance with control measures (E)
- Feedback from staff on BMPs (E)
- Number and effectiveness of post-construction control measures (P, E)

Creek and Ditch Maintenance

- Number of tailgate meetings and training sessions (P)
- Feedback from tailgate meetings and training sessions (E)

Landscape Maintenance

- Number of tailgate meetings and training sessions (P)
- Feedback from tailgate meetings and training sessions (E)
- Reduction in activities and use of products that contribute target pollutants to runoff; estimated load reduction (E)

VII. GLOSSARY

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1. **Best Management Practices (BMPs)** – Best management practices means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of “waters of the United States.” BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (40 CFR § 122.2)
2. **Maximum Extent Practicable (MEP)** – A technology-based standard established by congress in CWA §402(p)(3)(B)(iii) that municipal dischargers of storm water must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve. MEP is generally the result of emphasizing pollution prevention and source control BMPs as the first lines of defense in combination with treatment methods where appropriate serving as additional lines of defense. The MEP approach is an ever evolving, flexible and advancing concept, which considers technical and economic feasibility.
3. **Measurable Goal** – Defined tasks or accomplishments that are associated with implementing best management practices.
4. **Minimum Control Measure** – A storm water program area that must be addressed by all regulated MS4s. The following six minimum control measures are required to be addressed by the regulated Small MS4s: Public Education and Outreach, Public Involvement/Participation, Illicit discharge Detection and Elimination, Construction Site Runoff Control, Post-Construction Runoff Management, Facility Operations.
5. **New Development** – land disturbing activities, structural development, including construction or installation of a building or structure, creation of impervious surfaces, and land subdivision.
6. **Non-Structural BMP** – The use of planning procedures, riparian zone preservation, open space, etc. to ensure the long-term protection of water quality.
7. **Outfall** – A point source at the point where a Facilities separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States. (40 CFR § 122.26(b)(9))
8. **Point Source** – Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. (40 CFR § 122.2)
9. **Regulated Small MS4** – A small MS4 that is required to be permitted for discharging storm water through its MS4 to waters of the U.S. and is designed either automatically by the U.S. EPA because it is located within an urbanized

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area, or designated by the SWRCB or RWQCB in accordance with the designation criteria listed at Finding 11 of the General Permit.

10. **Redevelopment** - Redevelopment means, on an already developed site, the creation or addition of at least 5,000 square feet of impervious surface. Redevelopment includes, but is not limited to: the expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to these SUSMP's, the Design Standards apply only to the addition, and not to the entire development.
11. **Restaurant** – A stand-alone facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption.
12. **Small Municipal Separate Storm Sewer System (Small MS4)** – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that are:
 - i. Owned or operated by the United States, a state, city, town, boroughs, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district, or drainage district, or similar entity, or an Native American tribe or an authorized Native American tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.
 - ii. Not defined as “large” or “medium” municipal separate storm sewer systems.
 - iii. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings. (40 CFR §122.26(b)(16))
13. **Source Control BMP** – any schedules of activities, prohibitions of practices, maintenance procedures, managerial practices or operational practices that aim to prevent storm water pollution by reducing the potential for contamination at the source of pollution.
14. **Structural BMP** – Any structural facility designed and constructed to mitigate the adverse impacts of storm water and urban runoff pollution (e.g. detention, infiltration, structural enclosure, etc.). The category may include both treatment Control BMPs and Source Control BMPs.

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15. **Treatment** – The application of engineered systems that use physical, chemical, or biological processes to remove pollutants. Such processes include, but are not limited to, filtration, gravity settling, media adsorption, biodegradation, biological uptake, chemical oxidation, and UV radiation.
16. **Treatment Control BMP** – Any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption, or any other physical, biological, or chemical process.

VIII. ABBREVIATIONS

1. **ASC** – Agency Staff Committee
2. **BASMAA** – Bay Area Storm water Management Agencies Association
3. **BMP** – Best Management Practice
4. **CCC** – California Conservation Corps
5. **CEQA** – California Environmental Quality Act
6. **CWA** – Clean Water Act
7. **DEM** – Department of Environmental Management
8. **DFG** – Department of Fish and Game
9. **EIR** – Environmental Impact Report
10. **ESC** – Erosion and Sediment Control
11. **FONR** – Friends of the Napa River
12. **MEP** – Maximum Extent Practicable
13. **MS4** - Small Municipal Separate Storm Sewer System
14. **NOI** – Notice of Intent
15. **NPDES** – National Pollutant Discharge Elimination System
16. **NRCS** – National Resource Conservation Service
17. **RCD** – Resource Conservation District
18. **SFRWQCB** – San Francisco Regional Water Quality Control Board
19. **SWMP** – Stormwater Management Program
20. **SWPPP** – Stormwater Pollution Prevention Plan
21. **SWRCB** – State Water Resources Control Board
22. **TMDL** – Total Maximum Daily Load