

C-8.0 CONSTRUCTION

C-8.1 Introduction

The Permittees regulate construction activities and have responsibility for the construction and reconstruction of municipal facilities and infrastructure. Concern over construction sites as a major source of sediment and other pollutants has meant that construction activity has been a focus of the Permittees' compliance program since the First Term Permits.

With the adoption of the Third Term Permits, the construction element of the program has been further developed. Major components of this program include procedures for site planning that incorporate:

- Consideration of potential water-quality impacts;
- Requirements for nonstructural and structural BMPs;
- Procedures for identifying priorities for inspecting sites and enforcing control measures that consider the nature of the construction activity, topography, and the characteristics of soils and receiving water quality; and
- Appropriate educational and training measures.

The Construction Program presents requirements and guidelines for pollution prevention methods that must be used by construction site owners, developers, contractors, and other responsible parties, in order to protect water quality from discharges as a result of construction site activities. To ensure that the Program is implemented, each jurisdiction conducts inspections before the rainy season to verify the appropriateness and implementation of BMPs and takes enforcement action as necessary. Training and outreach is regularly scheduled to make certain that implementation occurs consistently throughout Orange County.

C-8.2 Program Development

In 1993, the New Development/Construction Task Force, comprised of representatives from the Principal Permittee, Building Industry Association (BIA), Association of General Contractors (AGC) and Civil Engineers & Land Surveyors of California (CELSOC), completed a report entitled "Best Management Practices For Public Works Construction" (**Draft 2000 DAMP Appendix H**), that provided the basis for requiring the use of structural and non-structural Best Management Practices (BMPs) at construction sites.

In 1997 the Permittees certified to the Regional Boards that that they were implementing 1993 DAMP Appendix H. At a minimum, BMP selection for public works projects was required to be consistent with the Green Book standards for site maintenance and environmental protection as well as the General Construction Permit for sites with five (5) acres or more of disturbed land. **Exhibit A of 1993 DAMP Appendix H** provided a list of standard practice structural and non-structural BMPs for construction activity.

In 2000, as a part of the Third Term Permit renewal process, the Permittees recognized the need to further develop the initial efforts to address all phases of construction activity. In early 2001, the TAC and the Permittees re-established the Task Force.

The Construction Program developed under the auspices of the Task Force includes the inventorying of sites, prioritization of sites based on threat to water quality, BMP implementation, inspection, enforcement, reporting of non-compliant sites and education and training. The goals of the program are to provide each Permittee with:

- A program framework for reducing the adverse impacts that public and private construction may have on water quality;
- An iterative process by which they can effectively monitor and respond to problems as they are discovered; and
- Methodologies to meet NPDES permit requirements.

C-8.3 Program Implementation

In May 2002, a construction site inventory spreadsheet was finalized and distributed to the Permittees so that each municipality could develop their inventories by October 15, 2002, as required by Section VIII.1 of the 2002 Santa Ana Permit. Prior to October 1st of the 2004-05 reporting year, the construction site inventories were updated.

Prior to the end of the wet season, thirty-four (34) Permittees inspected 5,504 high priority construction sites, 1,542 medium priority construction sites, and 8,021 low priority construction sites this reporting period. In 2003-04, 8,445 high priority, 5,731 medium priority, and 11,363 low priority construction sites were inspected; and in 2002-03, 4,060 high priority, 15,937 medium priority, and 5,834 low priority construction sites were inspected (**Table C-8.1**).

As a result of the 2004-05 inspections, thirty-three (33) Permittees reported 1,514 construction sites were out of compliance and required 1,521 re-inspections compared to 1,066 construction sites out of compliance requiring 1,072 re-inspections in 2003-04; and 408 construction sites out of compliance requiring 542 re-inspections in 2002-03 (**Table C-8.2**).

Necessary enforcement actions that were taken by thirty-three (33) Permittees as a result of the 2004-05 inspections included 445 Educational Letters, 1,052 Notices of Noncompliance, 74 Administrative Compliance Orders, 81 Cease and Desist Orders, and 47 Misdemeanor/Infractions compared to 1,597 Educational Letters, 1,419 Notices of Noncompliance, 401 Administrative Compliance Orders, 58 Cease and Desist Orders, and 0 Misdemeanor/Infractions in 2003-04; 554 Educational Letters, 531 Notices of Non compliance, 289 Administrative Compliance Orders, 19 Cease and Desist Orders, and 2 Misdemeanor/Infractions in 2002-03 (**Table C-8.3**).

Headline Indicator – Number of Sites Inspected: During 2004-05, thirty-four (34) Permittees inspected a total of 15,067 construction sites within their jurisdiction prior to the end of the wet season. In 2003-04, a total of 25,549 construction sites were inspected, and in 2002-03, a total of 25,831 construction sites were inspected.

Headline Indicator – Extent of Compliance: As a result of the 2004-05 inspections, thirty-three (33) Permittees reported 1,514 construction sites were out of compliance and required 1,521 re-inspections compared to 1,066 construction sites out of compliance requiring 1,072 re-inspections in 2003-04; and 408 construction sites out of compliance requiring 542 re-inspections in 2002-03.

Headline Indicator – Number and Level of Enforcement Actions: As a result of the 2004-05 inspections, thirty-three (33) Permittees reported taking a total of 1,699 enforcement actions. This compares to 3,475 enforcement actions taken in 2003-04, and 1,395 enforcement actions taken in 2002-03.

C-8.4 Program Training and Outreach

In an effort to facilitate effective inspections and to document compliance with this requirement, the Principal Permittee held training on September 29, 2004 on performing construction site inspections. This workshop focused on how the various inspectors should conduct a construction site inspection and things that they should look for such as proper implementation and maintenance of erosion controls, sediment controls as well the prevention of non-stormwater discharges. To assist responsible municipal and contract/lease staff in understanding the Construction Program, two training modules were developed.

The two training modules are 1) *Construction Program Management* and 2) *Inspecting Construction Site BMP's*.

Construction Program Management (DAMP Appendix B Exhibit B-8.I)

This training module generally targets staff responsible for managing the NPDES program for construction and addresses: the laws and regulations applicable to construction and grading activities; the connection between construction activities and water quality; inventory and prioritization of construction sites; implementation of construction site BMPs; documentation and enforcement requirements; reporting procedures for non-compliance; program effectiveness assessment; and training.

No sessions of this training module were conducted this reporting period.

Inspecting Construction Site BMP's (DAMP Appendix B Exhibit B-8.II)

This training module generally targets staff responsible for conducting inspections of both private and public construction sites and addresses: the laws and regulations applicable to construction and grading activities; the connection between construction

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activities and water quality; inspection of construction site BMPs; documentation and enforcement procedures; and examples of what to look for in construction site BMPs.

On September 29, 2004, Construction Inspection training was provided in two sessions: ninety-four (94) staff members from twenty-three (23) Permittees attended the morning session, and seventy (73) staff members from seventeen (17) Permittees attended the afternoon session.

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Table C-8.1: Construction Site Inspections Comparison of 2002-03, 2003-04 and 2004-05

PERMITTEES	Number of Sites Inspected								
	HIGH 2002-03	HIGH 2003-04	HIGH 2004-05	MEDIUM 2002-03	MEDIUM 2003-04	MEDIUM 2004-05	LOW 2002-03	LOW 2003-04	LOW 2004-05
Aliso Viejo	2	3	2	51	51	1	53	0	39
Anaheim	3	0	0	51	27	48	138	839	850
Brea	0	4	3	20	10	6	9	8	36
Buena Park	0	0	2	20	9	15	180	19	590
Costa Mesa	30	19	15	0	0	0	2,223	5,974	522
Cypress	1	2	5	0	1	0	7	9	1
Dana Point*	NA	16	24	NA	4	8	NA	1,077	182
Fountain Valley	25	5	6	0	0	0	163	353	87
Fullerton	84	17	1	3	34	0	30	67	10
Garden Grove	0	9	0	0	0	0	56	17	49
Huntington Beach	25	3	59	123	66	165	376	422	320
Irvine	132	67	114	1	41	99	2	63	175
La Habra	0	0	0	12	1	1	560	353	360
La Palma	25	0	6	123	0	0	376	5	0
Laguna Beach	1	1	2	32	47	111	0	0	0
Laguna Hills	210	183	209	0	0	0	0	0	0
Laguna Niguel	1	14	34	7	0	0	304	109	1,398
Laguna Woods	34	7	1	0	0	3	27	4	0
Lake Forest	4	2	1	21	9	13	18	5	1
Los Alamitos	0	0	NA	0	1	NA	0	292	NA
Mission Viejo	1,869	2,570	1,100	2,040	506	495	0	0	0
Newport Beach	4	3	2	54	23	0	162	270	648
Orange	3	7	7	20	40	37	563	193	153
Placentia	0	1	1	3	6	4	8	5	5
Rancho Santa Margarita	0	0	0	0	2	2	24	0	269
San Clemente	NA	34	276	NA	120	163	NA	0	0
San Juan Capistrano	1,304	199	48	12,595	4,674	300	0	0	400
Santa Ana	0	0	0	73	29	41	63	51	68
Seal Beach	NA	2	1	NA	0	0	NA	975	1,612
Stanton	NA	2	4	NA	0	4	NA	0	25
Tustin	5	6	13	1	7	4	49	56	4
Villa Park	0	0	0	0	0	0	127	166	175
Westminster	18	5	5	4	0	0	8	11	22
Yorba Linda	2	7	10	23	23	22	14	20	20
County of Orange/OCFCD	278	5,267	3,553	660	**See explanation below	**See explanation below	294	**See explanation below	**See explanation below
Totals	4,060	8,455	5,504	15,937	5,731	1,542	5,834	11,363	8,021

NA = Not Available

*includes undetermined amount and different categories

** the database system the County uses to track construction inspections does not differentiate between high, medium, and low priority construction sites; therefore, all sites are classified as "high" priority.

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Table C-8.2: Inspection Results, Comparison of 2002-03, 2003-04 and 2004-05

PERMITTEES	2002-03		2003-04		2004-05	
	Number of Construction Sites Out of Compliance	Number of Re-Inspections Due to Non-Compliance	Number of Construction Sites Out of Compliance	Number of Re-Inspections Due to Non-Compliance	Number of Construction Sites Out of Compliance	Number of Re-Inspections Due to Non-Compliance
Aliso Viejo	27	27	45	33	21	21
Anaheim	4	4	55	14	33	48
Brea	1	1	0	0	2	3
Buena Park	0	0	5	5	29	15
Costa Mesa	2	3	NA	NA	0	0
Cypress	NA	NA	1	1	2	2
Dana Point	NA	NA	NA	NA	98	105
Fountain Valley	56	56	43	43	4	4
Fullerton	8	12	105	105	8	2
Garden Grove	3	3	4	4	1	1
Huntington Beach	54	130	23	39	150	54
Irvine	3	3	33	40	35	35
La Habra	14	17	18	18	68	81
La Palma	0	0	0	0	1	2
Laguna Beach	NA	NA	NA	NA	68	68
Laguna Hills	2	3	7	8	9	9
Laguna Niguel	14	26	24	24	23	23
Laguna Woods	1	1	0	0	6	6
Lake Forest	2	2	0	0	7	7
Los Alamitos	0	0	0	0	NA	NA
Mission Viejo	57	61	67	69	137	139
Newport Beach	0	0	NA	NA	67	75
Orange	0	0	7	7	8	8
Placentia	5	5	5	5	6	6
Rancho Santa Margarita	0	0	0	0	8	5
San Clemente	NA	NA	161	161	NA	NA
San Juan Capistrano	50	50	56	84	49	72
Santa Ana	13	23	7	7	12	22
Seal Beach	NA	NA	21	21	NA	NA
Stanton	NA	NA	0	0	2	8
Tustin	19	67	0	0	7	40
Villa Park	0	0	0	0	0	0
Westminster	1	2	5	10	5	12
Yorba Linda	7	6	4	4	6	6
County of Orange/OCFCD	65	40	370	370	642	642
Totals	408	542	1,066	1,072	1,514	1,521

NA = Not Available

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Table C-8.3: Enforcement Action Taken, Comparison of 2002-03, 2003-04 and 2004-05

PERMITTEES	FY 2002-03					FY 2003-04					FY 2004-05				
	Administrative Remedies				Criminal Remedies	Administrative Remedies				Criminal Remedies	Administrative Remedies				Criminal Remedies
	No. of EL/VW	No. of NON	No. of AC	Number of C&D Orders	Misdr, Infrct	No. of EL/VW	No. of NON	No. of AC	Number of C&D Orders	Misdr, Infrct	No. of EL/VW	No. of NON	No. of AC	Number of C&D Orders	Misdr, Infrct
Aliso Viejo	0	0	27	6	0	0	0	32	7	0	0	0	51	43	0
Anaheim	0	0	2	0	0	55	0	0	0	0	6	0	0	0	0
Brea	15	1	0	0	0	0	0	0	0	0	0	1	0	0	0
Buena Park	0	0	0	0	0	0	3	1	1	0	0	63	0	6	0
Costa Mesa	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0
Cypress	0	4	0	0	0	1	10	0	0	0	1	4	0	0	0
Dana Point	2	32	0	0	1	7	36	0	3	0	29	61	3	5	0
Fountain Valley	400	4	21	6	0	27	12	15	9	0	168	0	5	2	0
Fullerton	0	5	1	0	0	51	44	0	5	0	NA	NA	NA	NA	NA
Garden Grove	2	1	0	0	0	3	4	0	0	0	0	1	0	0	0
Huntington Beach	0	16	1	1	0	0	23	1	0	0	0	80	0	0	24
Irvine	0	3	0	0	0	33	0	0	0	0	35	35	0	0	0
La Habra	0	14	0	0	0	0	18	0	0	0	52	7	2	6	0
La Palma	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Laguna Beach	54	14	37	0	1	23	23	29	0	0	24	31	13	0	0
Laguna Hills	0	3	0	0	0	4	3	0	0	0	1	5	0	0	0
Laguna Niguel	0	26	0	0	0	0	24	0	0	0	0	14	0	0	0
Laguna Woods	2	0	0	0	0	0	0	0	0	0	8	8	0	0	0
Lake Forest	NA	NA	NA	NA	NA	0	0	0	0	0	0	2	0	0	0
Los Alamitos	4	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA	NA
Mission Viejo	NA	NA	NA	NA	NA	238	93	0	0	0	0	21	0	0	0
Newport Beach	6	250	200	0	0	558	618	315	0	0	0	2	0	0	1
Orange	0	0	0	0	0	7	7	0	0	0	0	8	0	0	0
Placentia	0	5	0	1	0	0	0	1	0	0	0	1	0	1	0
Rancho Santa Margarita	0	0	0	0	0	0	0	0	0	0	9	5	0	1	0
San Clemente	1	2	0	1	0	142	71	7	33	0	34	20	0	11	21
San Juan Capistrano	50	50	0	0	0	50	6	0	0	0	8	35	0	6	0
Santa Ana	0	13	0	0	0	0	7	0	0	0	0	3	0	0	0
Seal Beach	NA	NA	NA	NA	NA	41	41	0	0	0	0	19	0	0	0
Stanton	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0	0	0
Tustin	0	19	0	0	0	0	0	0	0	0	0	0	0	0	1
Villa Park	15	0	0	0	0	12	0	0	0	0	0	0	0	0	0
Westminster	0	1	0	0	0	10	0	0	0	0	0	12	0	0	0
Yorba Linda	0	3	0	4	0	327	4	0	0	0	0	6	0	0	0
County of Orange/OCFCD	0	65	0	0	0	5	372	0	0	0	70	607	0	0	0
Totals	554	531	289	19	2	1,597	1,419	401	58	0	445	1,052	74	81	47

NA = Not Available

EL/VW = Educational Letter/Verbal Warning

NON = Notice of Non-Compliance

AC = Administrative Compliance Order

C&D = Cease and Desist

Misdr./Infrct = Misdemeanor/Infraction