

**2013 UPDATE OF REPORT ON THE COMPLIANCE COSTS FOR THE
FINAL (2013) DRAFT INDUSTRIAL GENERAL PERMIT (IGP)
SEPTEMBER 6, 2013**

DESCRIPTION

On July 16, 2012 State Water Board staff provided an Analysis of the Compliance Costs for the IGP (2012 Cost Report). This cost report summarized discharger compliance costs for the 2012 Draft Industrial General Permit (Draft 2012 IGP) compared to the cost of complying with existing requirements in the 1997 Statewide General Permit for Discharges of Storm Water Associated with Industrial Activity (1997 IGP). State Water Board staff is now providing an updated cost report summarizing discharger compliance costs of the 2013 Final Draft Industrial General Permit (2013 Final Draft IGP), compared to the 1997 IGP. The 2012 Cost Report is available at the follow website:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/2012npdes_genprmt.shtml

The methodologies and assumptions used in this 2013 Cost Update are essentially the same as the methodology and assumptions used in the 2012 Cost Report; therefore the 2013 Cost Update solely includes the updated conclusions. The Microsoft Excel workbook containing the data and formulas used for the 2013 Cost Update will be available at the website below following the release of this update:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/industrial_permitdocs.shtml

BACKGROUND / PURPOSE

The purpose of the 2013 Cost Update is to provide an updated estimate of discharger compliance costs associated with the 2013 Final Draft IGP as compared to the cost of complying with existing requirements in the 1997 IGP. In preparing this cost update, State Water Board staff implemented the US EPA-recommended methodology in preparing the economic analysis of water quality standards. Both the 2013 Cost Update and the 2012 Cost Report are not a full economic analysis but an estimate of the pollution control project costs necessary to comply with the regulations as described in section 3.1 of the referred US EPA-recommended methodology.

In our 2012 Cost Report, three different versions of the IGP were analyzed: the [1997 IGP](#) (current permit); the previously proposed [2011 Draft](#) Industrial General Permit; and the previously proposed [2012 Draft IGP](#). The 2013 Cost Update compares discharger compliance costs of the 2013 Final Draft IGP with the costs to comply with the existing [1997 IGP](#).

RESULTS OF 2013 COST UPDATE

To conduct the 2013 Cost Update facilities were categorized with corresponding assumed probabilities of Numeric Action Level (NAL) exceedances. Table 1 below provides estimated annual average costs for an average facility over a five year period depending upon the predicted NAL exceedances. Since the analysis uses present values, the timeline for this five year analysis (shown in Figure 1 below) starts with the current date the analysis was performed (July 1, 2013) versus the proposed effective date of the new permit. The Appendix of the 2013 Cost Update contains tables that show further details.

Costs estimates are derived using available information from studies conducted by other states and by various industry groups. A list of costs, estimates and assumptions are included in the 2013 Cost Update. When considering the cost estimates, readers are reminded that the projected costs reflect average costs; therefore the anticipated costs for most small facilities will be less than the average costs, and the costs for most large facilities will be greater.

2013 Cost Update Findings:

The following findings are based on the assumptions that 70 percent of all industrial facilities will remain in Baseline status for the 5-year permit term of the 2013 Final Draft IGP, 20 percent will have Level 1 NAL exceedances only, and an additional 10 percent will have both Level 1 and Level 2 NAL exceedances:

- The average cost per facility to comply with the existing 1997 IGP is estimated to be approximately \$32,700 per year or \$162,500 over a five year period.
- The 2013 Final Draft IGP will increase costs for a facility
 - without numeric action level (NAL) exceedances (Baseline or Level 0 status) by 13%,
 - with NAL exceedances in one year (Level 1 status) by 17%, and
 - with exceedances in two years (Level 2 status) by 33%.
- The additional costs for 70 percent of facilities to comply with the 2013 Final Draft IGP, in addition to the current cost to comply with the existing 1997 IGP, will be approximately \$4,500 more per year.
- The calculated total cost for all facilities to comply with the 2013 Final Draft IGP over a five year period is \$1.74 Billion, compared to the total compliance cost of the 1997 IGP of approximately \$1.57 Billion.
- There is an increase of approximately \$170 Million for statewide compliance with the new 2013 Final Draft IGP over a five year period for all facilities subject to Notice of Intent (NOI) coverage.

Table 1 - Five Year Costs

5 Year Estimated Total Cost	# Facilities	1997 Permit	2013 Permit	% Increase
<u>Level 0 (Baseline) Scenario</u>				
(70 percent of all industrial dischargers)	6,489	\$162,500	\$183,400	13%
<u>Level 1 Scenario</u>				
(20 percent of all industrial dischargers)	1,854	\$162,500	\$188,900	17%
<u>Level 2 Scenario</u>				
(10 percent of all industrial dischargers)	927	\$162,500	\$215,700	33%
TOTAL Average Cost	9,270	\$162,500	\$188,400	15%

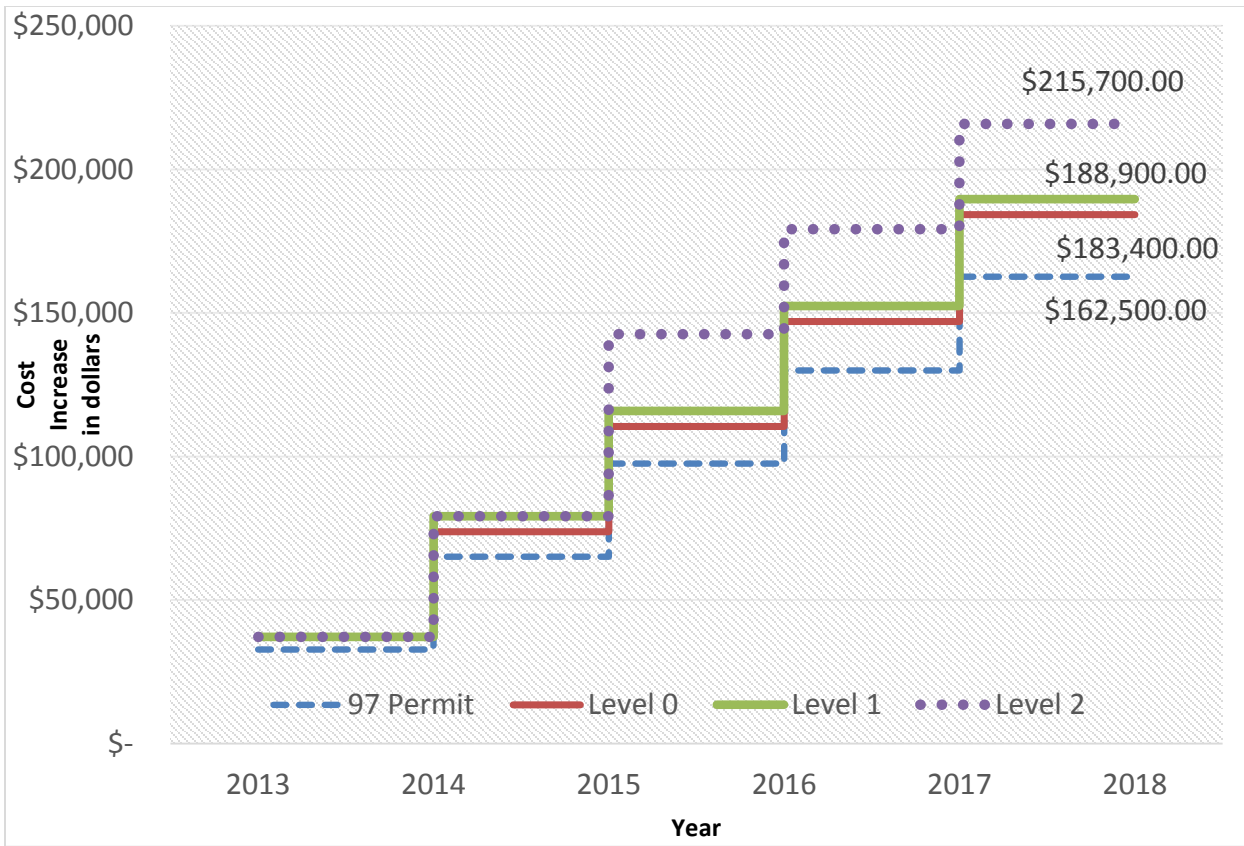


Figure 1 - Five Year Costs

APPENDIX - DETAILED TABLES

Existing 1997 Industrial General Permit	1st Year	2nd year	3rd year	4th Year	5th year	TOTAL
Average One Time Cost	\$ 280	\$ -	\$ -	\$ -	\$ -	\$ 280
Training (50/50)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Permit Registration (excludes permit fee) (50/50)	\$ 280	\$ -	\$ -	\$ -	\$ -	\$ 280
SWPPP Development (use existing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment (pH/EC Meter & Rain Gauge)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Average Annual Cost	\$ 32,400	\$ 32,400	\$ 32,400	\$ 32,400	\$ 32,400	\$ 162,200
Sample Collection / Analysis	\$ 5,950	\$ 5,950	\$ 5,950	\$ 5,950	\$ 5,950	\$ 29,750
Implement operational source control BMPs (05/95)	\$ 21,560	\$ 21,560	\$ 21,560	\$ 21,560	\$ 21,560	\$ 107,800
Structural/Treatment BMP Operation & Maintenance (05/95)	\$ 690	\$ 690	\$ 690	\$ 690	\$ 690	\$ 3,450
Annual Report (50/50)	\$ 640	\$ 640	\$ 640	\$ 640	\$ 640	\$ 3,200
Visual Observations (50/50)	\$ 2,060	\$ 2,060	\$ 2,060	\$ 2,060	\$ 2,060	\$ 10,300
Recordkeeping (50/50)	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 950
Permit Fee (assume same price)	\$ 1,360	\$ 1,360	\$ 1,360	\$ 1,360	\$ 1,360	\$ 6,800
TOTAL AVERAGE COST	\$ 32,700	\$ 32,400	\$ 32,400	\$ 32,400	\$ 32,400	\$ 162,500

2013 Level 0 Scenario	1st Year	2nd year	3rd year	4th Year	5th year	TOTAL
Average One Time Cost	\$ 610	\$ -	\$ -	\$ -	\$ -	\$ 610
Training (50/50)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Permit Registration (excludes permit fee) (50/50)	\$ 600	\$ -	\$ -	\$ -	\$ -	\$ 600
SWPPP Development (use existing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment (pH/EC Meter & Rain Gauge)	\$ 10	\$ -	\$ -	\$ -	\$ -	\$ 10
Average Annual Cost	\$ 36,600	\$ 36,600	\$ 36,600	\$ 36,600	\$ 36,600	\$ 182,800
Sample Collection / Analysis	\$ 10,020	\$ 10,020	\$ 10,020	\$ 10,020	\$ 10,020	\$ 50,100
Implement operational source control BMPs (05/95)	\$ 21,560	\$ 21,560	\$ 21,560	\$ 21,560	\$ 21,560	\$ 107,800
Structural/Treatment BMP Operation & Maintenance (05/95)	\$ 690	\$ 690	\$ 690	\$ 690	\$ 690	\$ 3,450
Annual Report (50/50)	\$ 490	\$ 490	\$ 490	\$ 490	\$ 490	\$ 2,450
Visual Observations (50/50)	\$ 2,250	\$ 2,250	\$ 2,250	\$ 2,250	\$ 2,250	\$ 11,250
Recordkeeping (50/50)	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 950
Permit Fee (assume same price)	\$ 1,360	\$ 1,360	\$ 1,360	\$ 1,360	\$ 1,360	\$ 6,800
TOTAL AVERAGE COST	\$ 37,200	\$ 36,600	\$ 36,600	\$ 36,600	\$ 36,600	\$ 183,400

2013 Level 1 Scenario	1st Year	2nd year	3rd year	4th Year	5th year	TOTAL
Average One Time Cost	\$ 610	\$ -	\$ -	\$ -	\$ -	\$ 610
Training (50/50)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Permit Registration (excludes permit fee) (50/50)	\$ 600	\$ -	\$ -	\$ -	\$ -	\$ 600
SWPPP Development (use existing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment (pH/EC Meter & Rain Gauge)	\$ 10	\$ -	\$ -	\$ -	\$ -	\$ 10
Average Annual Cost	\$ 36,600	\$ 36,600	\$ 36,600	\$ 36,600	\$ 36,600	\$ 182,800
Sample Collection / Analysis	\$ 10,020	\$ 10,020	\$ 10,020	\$ 10,020	\$ 10,020	\$ 50,100
Implement operational source control BMPs (05/95)	\$ 21,560	\$ 21,560	\$ 21,560	\$ 21,560	\$ 21,560	\$ 107,800
Structural/Treatment BMP Operation & Maintenance (05/95)	\$ 690	\$ 690	\$ 690	\$ 690	\$ 690	\$ 3,450
Annual Report (50/50)	\$ 490	\$ 490	\$ 490	\$ 490	\$ 490	\$ 2,450
Visual Observations (50/50)	\$ 2,250	\$ 2,250	\$ 2,250	\$ 2,250	\$ 2,250	\$ 11,250
Recordkeeping (50/50)	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 950
Permit Fee (assume same price)	\$ 1,360	\$ 1,360	\$ 1,360	\$ 1,360	\$ 1,360	\$ 6,800
Average Exceedance Dependent Costs Sum:	\$ -	\$ 5,520	\$ -	\$ -	\$ -	\$ 5,530
Evaluate BMPs	\$ -	\$ 1,650	\$ -	\$ -	\$ -	\$ 1,650
Prepare Level 1 ERA Report BMPs	\$ -	\$ 750	\$ -	\$ -	\$ -	\$ 750
Equipment (if pH exceeded, less than 10% of all facilities)	\$ -	\$ 20	\$ -	\$ -	\$ -	\$ 20
QISP training	\$ -	\$ 2,730	\$ -	\$ -	\$ -	\$ 2,730
SWPPP Update	\$ -	\$ 380	\$ -	\$ -	\$ -	\$ 380
TOTAL AVERAGE COST	\$ 37,200	\$ 42,100	\$ 36,600	\$ 36,600	\$ 36,600	\$ 188,900

2013 Level 2 Scenario	1st Year	2nd year	3rd year	4th Year	5th year	TOTAL
Average One Time Cost	\$ 610	\$ -	\$ -	\$ -	\$ -	\$ 610
Training (50/50)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Permit Registration (excludes permit fee) (50/50)	\$ 600	\$ -	\$ -	\$ -	\$ -	\$ 600
SWPPP Development (use existing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment (pH/EC Meter & Rain Gauge)	\$ 10	\$ -	\$ -	\$ -	\$ -	\$ 10
Average Annual Cost	\$ 36,600	\$ 36,600	\$ 36,600	\$ 36,600	\$ 36,600	\$ 182,800
Sample Collection / Analysis	\$ 10,020	\$ 10,020	\$ 10,020	\$ 10,020	\$ 10,020	\$ 50,100
Implement operational source control BMPs (05/95)	\$ 21,560	\$ 21,560	\$ 21,560	\$ 21,560	\$ 21,560	\$ 107,800
Structural/Treatment BMP Operation & Maintenance (05/95)	\$ 690	\$ 690	\$ 690	\$ 690	\$ 690	\$ 3,450
Annual Report (50/50)	\$ 490	\$ 490	\$ 490	\$ 490	\$ 490	\$ 2,450
Visual Observations (50/50)	\$ 2,250	\$ 2,250	\$ 2,250	\$ 2,250	\$ 2,250	\$ 11,250
Recordkeeping (50/50)	\$ 190	\$ 190	\$ 190	\$ 190	\$ 190	\$ 950
Permit Fee (assume same price)	\$ 1,360	\$ 1,360	\$ 1,360	\$ 1,360	\$ 1,360	\$ 6,800
Average Exceedance Dependent Costs L1:	\$ -	\$ 5,500	\$ -	\$ -	\$ -	\$ 5,500
Evaluate BMPs	\$ -	\$ 1,650	\$ -	\$ -	\$ -	\$ 1,650
Prepare Level 1 ERA Report BMPs	\$ -	\$ 750	\$ -	\$ -	\$ -	\$ 750
Equipment (if pH exceeded, less than 10% of all facilities)	\$ -	\$ 20	\$ -	\$ -	\$ -	\$ 20
QISP training	\$ -	\$ 2,730	\$ -	\$ -	\$ -	\$ 2,730
SWPPP Update	\$ -	\$ 380	\$ -	\$ -	\$ -	\$ 380
Average Exceedance Dependent Costs L2:	\$ -	\$ -	\$ 26,800	\$ -	\$ -	\$ 26,800
Evaluate need for treatment/structural control BMPs (50/50)	\$ -	\$ -	\$ 10,500	\$ -	\$ -	\$ 10,500
Prepare Technical report for best option (50/50)	\$ -	\$ -	\$ 1,650	\$ -	\$ -	\$ 1,650
Implement Additional Structural/Treatment BMPs (5/95)	\$ -	\$ -	\$ 13,600	\$ -	\$ -	\$ 13,600
Additional BMP Operation & Maintenance (Annual O&M) (5/95)	\$ -	\$ -	\$ 690	\$ -	\$ -	\$ 690
Increase Sample Collection / Analysis (twice per quarter annually)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SWPPP Update	\$ -	\$ -	\$ 380	\$ -	\$ -	\$ 380
TOTAL AVERAGE COST	\$ 37,200	\$ 42,100	\$ 63,400	\$ 36,600	\$ 36,600	\$ 215,700