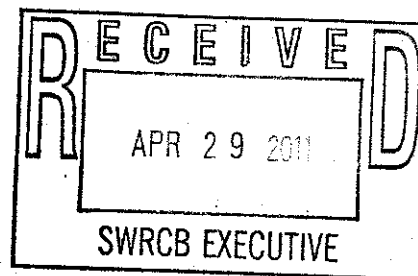




Alcoa Inc.

April 29, 2011

Ms. Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
1001 I Street
Sacramento, California 95814



Re: Alcoa Inc. Comments
Reissuance of the National Pollutant Discharge Elimination System General Permit for
Discharges of Storm Water Associated with Industrial Activities (Industrial General Permit)
General Permit No. CAS000001

Dear Ms. Townsend and Members of the SWRCB:

Attached to this cover letter are comments Alcoa Inc (Alcoa). wishes to present to the State Water Resources Control Board (SWRCB) for consideration prior to issuing the final permit. Alcoa has a number of industrial facilities that either will be directly impacted by this permit because they are currently covered by the industrial general permit for storm water discharges issued in 1997, or may be covered in the future.

Alcoa appreciates this opportunity to provide comments on the proposed renewal industrial general permit. Alcoa would be willing to meet with SWRCB staff to discuss these issues and the State's storm water program in general. Please call me at 412-553-2996 or e-mail me at john.morton@alcoa.com if SWRCB staff have any questions concerning our comments or wish to set up a meeting.

Very truly yours,

A handwritten signature in black ink that reads "John D. Morton".

John D. Morton, P.E.
Senior Consultant
Alcoa Inc.
Water/Wastewater Group
EHS Services & Sustainability

Attachments: 1. Alcoa comments on 2011 Draft General Permit No. CAS000001
2. Alcoa comments on 2005 Draft General Permit No. CAS000001

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Alcoa Inc. Comments
On the Reissuance of the National Pollutant Discharge Elimination System General
Permit for Discharges of Storm Water Associated with Industrial Activities
General Permit No. CAS000001
January 28, 2011 Draft

Alcoa Inc. (hereinafter referred to as Alcoa), the world's leading producer of primary aluminum and fabricated aluminum, wishes to make the following comments to the State Water Resources Control Board (hereinafter referred to as SWRCB) on the draft renewal of the California National Pollutant Discharge Elimination System general permit for discharges of storm water associated with industrial activities (hereinafter referred to as the Industrial General Permit). Alcoa has manufacturing operations in 31 countries worldwide, and in over 25 states in the U.S. Alcoa industrial facilities in California that either are directly affected or may be affected by this Industrial General Permit are located in Carson, Fullerton, City of Industry, Newbury Park, Simi Valley, Sylmar, Torrance, and Visalia. The permitting of storm water from industrial sites is becoming more complex as additional experience is gained under the national and delegated states programs. Over 15 years of experience with the use of general permits for storm water discharges show certain assumptions and methods of permitting have not been as successful or appropriate as when they were originally developed and imposed on dischargers. Alcoa believes these learning experiences at the national and state levels should be evaluated for inclusion or exclusion under the Industrial General Permit.

Over the past ten years, Alcoa has commented on the renewal of general permits for the discharge of storm water associated with industrial activities in the states of Tennessee, Arkansas, South Carolina, Pennsylvania, New York, Ohio and Georgia. Alcoa also filed appeals – and reached settlement agreements - on the final general permits in Tennessee, Arkansas, South Carolina, Pennsylvania, Ohio, and Georgia. Our comments to this Industrial General Permit include our experience with the appeals and settlement discussions in these delegated states.

Alcoa commented (comments dated February 2, 2005) on the previous effort to renew the California general permit. Alcoa reaffirms those comments where appropriate and applicable. A copy of those comments are attached and made a part of this comment letter.

Comment 1: Use of BAT and BCT for Storm Water Permitting Purposes, and Developing Numerical Effluent Limits

A. Technology-Based Limits v. Water Quality-Based Limits in NPDES Discharge Permits

It is accurate to state that the federal Clean Water Act (CWA) requires that, at a minimum, permits contain effluent limits at least as stringent as technology-based limits developed under the National Pollutant Discharge Elimination System (NPDES) permit program. The federal technology-based limits are known as best

practical technology (BPT), best conventional technology (BCT), and best available technology (BAT). It is not accurate to state that the federal NPDES permit program requires the implementation of only BPT/BCT/BAT in every discharge permit. What the federal NPDES permitting program requires is that each parameter that will be regulated in a discharge permit be evaluated for a technology-based limit and a water quality-based limit. If the technology-based effluent limit is sufficiently stringent to also ensure discharger compliance with the water quality standards of the receiving stream, then the technology-based limit is placed in the permit. If, however, the technology-based limit is not sufficiently stringent to ensure discharger compliance with the water quality standards of the receiving stream, then the water-quality-based limit is placed in the permit. See Section 301(b)(1)(C) of the CWA.

B. Developing Technology-Based Limits under the CWA

The CWA is clear as to how technology-based limits are to be developed: for classes of industries - effluent limitations guidelines (ELGs) have been developed and are found in 40 CFR Subchapter N – Parts 405 to 671. For those industrial facilities not included in these ELGs, or other discharges not covered in a particular ELG, EPA has developed regulations for developing such limitations on a case-by-case basis (also referred to as best professional judgment, commonly abbreviated BPJ). These requirements are found in 40 CFR 125.3(c)(2), and include:

- The age of equipment and facilities involved
- The processes employed
- The engineering aspects of the application of various types of control techniques
- Process changes
- Non-water quality environmental impact including energy requirements
- The appropriate technology for the category class of point sources of which the applicant is a member, based on all available information
- Any unique factors related to the applicant
- The cost of achieving such effluent reduction

The rationale for this draft permit does not indicate how the State reached the conclusion in Finding E.42 on page 7 that the “USEPA benchmarks serve as an appropriate set of technology based effluent limitations that demonstrate compliance with BAT/BCT”, while complying with EPA’s regulations on the development of appropriate technology-based effluent limits.

EPA in developing its 2008 MSGP, as well as the previous MSGPs, has asserted that BPT/BCT/BAT is achieved via pollution prevention measures, rather than numeric limits (see Page 38, EPA’s Fact Sheet to the 2008 MSGP):

“The BAT/BPT/BCT effluent limits in this permit are expressed as specific pollution prevention requirements for minimizing the pollutant levels in the

discharge. In the context of this general permit, these requirements represent the best technologically available and economically practicable and achievable controls. EPA has long maintained that the combination of pollution prevention approaches and structural management practices required by these limits are the most environmentally sound way to control the discharge of pollutants in stormwater runoff from industrial facilities to meet the effluent limits. This approach is supported by the results of a comprehensive technical survey EPA completed in 1979. Pollution prevention continues to be the cornerstone of the NPDES stormwater program."

C. EPA's Benchmark Values

EPA has stated repeatedly that its benchmark values are NOT effluent limitations, and that exceeding them does not necessarily indicate permit non-compliance. Since first establishing them, EPA has not provided any information that benchmark values are appropriate for technology-based limits. EPA stated in the 1995 MSGP (see *Federal Register*, Vol. 60, No 189, pages 50824 and 50825):

"The "benchmarks" are the pollutant concentrations above which EPA determined represents a level of concern. The level of concern is the concentration at which a storm water discharge could potentially impair, or contribute to impairing water quality or affect human health from ingestion of water or fish. The benchmarks are also viewed by EPA as a level, that if below, a facility represents little potential for water quality concern."

And, in the 2000 MSGP, EPA said the following about the use of benchmark values (See *Federal Register*, Vol. 65, No. 210, page 64796):

"Statistical uncertainties inherent in the monitoring results will necessitate both operators and EPA exercising best professional judgment in interpreting the results. When viewed as an indicator, analytic levels considerably above benchmark values can serve as a flag to the operator that his SWPPP needs to be reevaluated and that pollutant loads may need to be reduced. Conversely, analytic levels below or near benchmarks can confirm to the operator that his SWPPP is doing its intended job."

Nothing in the draft permit, fact sheet, or accompanying information shows how EPA's benchmark values can be converted to numeric effluent limits that would conform to EPA's regulatory methodology in developing limits – either technology or water quality - for storm water discharges in California. Rather, EPA's purpose in developing benchmark values is to assist both the discharger and the regulatory agency in determining if a particular set of monitoring data is problematic or not. EPA has also stated that it takes an evaluation of the monitoring results in conjunction with the facility's pollution prevention measures to determine if there is cause for concern and not merely comparing the monitoring result to a benchmark value.

See Comment 9 below for further discussion of benchmark values.

D. Appropriateness of EPA's Benchmark Values for Use in California's Storm Water Permitting Program

The draft permit lists in Finding A.15 EPA's Nationwide Urban Runoff Program study conducted between 1979 to 1983 which influenced Congress in 1987 to the modify the CWA to address storm water discharges. However, since the 1987 CWA revisions both EPA and delegated states have over 15 years of regulating storm water discharges from industrial facilities via general permits and monitoring those discharges. Yet, there seems to be little published information available how effective this permitting effort has been. In one state – Pennsylvania – Alcoa was provided information on the storm water sampling under that state's general permit from covered industrial storm water discharges. Pennsylvania's permit at the time was similar to California's 1997 general permit. EPA's contractor Tetra Tech conducted the study for Pennsylvania, and looked at the 10 industrial categories regulated in the general permit. The report grouped the monitored pollutants into 3 categories: discontinue monitoring, continue monitoring, inconclusive. The monitoring data was not only compared to EPA's benchmark values; they were also compared to Pennsylvania water quality criteria values or other Pennsylvania-specific discharge requirements. In most cases, these values were more stringent than EPA's benchmark values. The table below contains the summary of the report findings:

Industrial Category	Discontinue Monitoring	Continue Monitoring	Inconclusive
SARA Title III, Section 313 Facilities	BOD ₅ , O&G, pH, Iron (dissolved)	Water priority chemicals	COD, TSS, TKN
Primary Metal Facilities	BOD ₅ , COD, O&G, pH	Iron (dissolved), Cr, Cd, Pb, water priority chemicals	As, TSS, TKN
Land Disposal Units	BOD ₅ , COD, NH ₃ , Nitrate + Nitrite N, O&G	As, Ba, Cd, Cr, CN, Iron (dissolved), Pb, Mg, Hg, Se	TDS, TOC, TKN
Wood Treatment Facilities	BOD ₅ , Iron (Dissolved), Nitrate + Nitrite N, O&G	Cr, COD, TSS	Cu, As, pentachlorophenol
Coal Pile Runoff	NSD	NSD	NSD
Battery Reclaimers	NSD	NSD	NSD
Airports	NSD	NSD	NSD
Steam Electric Facilities	NSD	NSD	NSD
Animal Handling and Meat Packing Facilities	NSD	NSD	NSD
Additional Facilities (light industry)	BOD ₅ , COD, O&G, P, pH	TSS, Iron (dissolved)	TKN

NSD – Not sufficient data to perform statistical analysis

The results of this limited study of permitted industrial facilities covered by the Pennsylvania general permit suggest that some long-held beliefs about storm

water quality require re-evaluation where those discharges have been subject to permits requiring pollution prevention measures. In all the industrial categories where there was sufficient data, oil and grease and pH monitoring were recommended to be discontinued. For TSS, only 2 industrial categories were recommended for continued monitoring, and in 2 other categories the analysis was inconclusive as to whether or not to continue monitoring. This study suggests that the current approach of using pollution prevention measures is effective but requires tweaking when it comes to which pollutants are actually of concern. Alcoa believes that before embarking on further treatment or imposing numeric effluent limits California should evaluate the effectiveness of its current industrial storm water permitting scheme and publish the results to demonstrate if a change is justified, and to ensure the appropriate parameters are being properly regulated and monitored.

E. Summary Comment

Based on the above discussion, Alcoa believes the permit needs rewritten to remove or modify all references and permit actions based on numeric action levels (NALs) and numeric effluent limitations (NELs) and their use in any corrective actions. California has not yet adequately documented justification for their use in the permitting process.

Comment 2: Qualified SWPPP Developer (QSD) and Qualified SWPPP Practitioner (QSP)

Alcoa does not agree with the mandatory requirement for every facility to have both a QSD and a QSP since it is not probable that facilities will have an employee that can meet the qualifications of a QSD as shown on page 16, Part VII.B1. By law and regulation, NPDES permit compliance is the responsibility of the owner/operator of the facility that cannot be delegated away. The facility personnel are the most familiar with plant operations and pollutant generation as well as those pollution prevention measures appropriate to the facility to control the discharge of such pollutants.

This condition also implies that all industrial facilities are of the same complexity and require the same level of expertise/training to develop and implement an effective SWPPP. No data supplied with this draft permit supports this assumption; indeed, no data has been made available to the public that indicates the current SWPPP development and implementation process is an issue at all. Finally, Alcoa cannot agree to a permit change when the details of the training necessary for these positions have not yet been developed and made available for review.

Alcoa requests that all mention of a QSD and/or QSP be eliminated from the Industrial General Permit.

Comment 3: Page 11, Part II.P.5 – Informing New Owner of the General Permit's Requirements

The draft permit places the burden of "permitting" on the seller of a facility, when the seller has no control over what the new buyer will do with the facility or can influence how the new buyer plans on implementing the provisions of the general permit for its processes and manufacturing procedures. This is not acceptable, and is the State's responsibility.

Comment 4: Page 13, Part III.B – Prohibition on Storm Water Discharges from Areas of Past Spills

This permit condition as currently written does not appear to take into account spill clean-up activities that would be in accordance with the CWA. Since it is virtually impossible to clean up every molecule of spilled material, many dischargers could not utilize this general permit if they had a spill yet cleaned that spill to acceptable standards. Alcoa requests language be added to the Industrial General Permit to address this situation. An example of such language that has been incorporated into other state general permits to address this situation, and could be added under Part III.B is:

1. Releases of Hazardous Substances or Oil

a. *The permittee must prevent or minimize the discharge of hazardous substances or oil in any discharge(s) in accordance with the SWPPP for the facility. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117 and 40 CFR 302 relating to spills or other releases of oils or hazardous substances.*

1). *Single Releases and Spills. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 40 CFR 117 or 40 CFR 302, occurs during a 24 hour period:*

a). *The permittee must notify the National Response Center (NRC) (800-424-8802); in accordance with the requirements of 40 CFR 110, 40 CFR 117 and 40 CFR 302 as soon as he or she has knowledge of the discharge;*

b). *The permittee must modify the facility's SWPPP required under Part VIII within 14 calendar days of knowledge of the release to: provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the SWPPP must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the SWPPP must be modified where appropriate.*

- 2). *Anticipated Discharges.* *Anticipated discharges containing a hazardous substance in an amount equal to or in excess of reporting quantities are those caused by events occurring within the scope of the relevant operating system. If the facility has (or will have) more than one anticipated discharge per year containing a hazardous substance in an amount equal to or in excess of a reportable quantity, the permittee must:*
- a). *Submit notifications of the first release that occurs during a calendar year (or for the first year of this permit, after submittal of an NOI); and*
 - b). *Provide a written description in the SWPPP of the dates on which such releases occurred, the type and estimate of the amount of material released, and the circumstances leading to the releases. In addition, the SWPPP must address measures to minimize such releases.*
 - c). *Where a discharge of a hazardous substance or oil in excess of reporting quantities is caused by a non-storm water discharge (e.g., a spill of oil into a separate storm sewer), that discharge is not authorized by this permit and must be reported as required under 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 (see above). In the event of a spill, the requirements of Section 311 of the CWA and other applicable provisions of Sections 301 and 402 of the CWA and any pertinent California or SWRCB regulations relating to spills continue to apply.*

Comment 5: Page 13, Part IV.A.3, Non-Storm Water Discharges, drinking fountain water

Alcoa would like to point out that allowing the discharge of drinking fountain water from a drain may violate the local sewer use ordinance, plumbing ordinance, and/or building code ordinance, which could result in confusion since the Industrial General Permit at Part IV.B.2 states that the non-storm water discharges are not to be in violation of any municipal agency ordinance or requirement. EPA proposed the same type of non-storm water discharge be authorized under the MSGP when it was renewed in 2000, and Alcoa commented that providing a blanket allowance for these types of discharges might not be advisable. EPA agreed, and did not include drinking fountain water as an allowable non-storm water discharge in the final permit. Below are the pertinent parts of the comment Alcoa submitted to EPA on this issue:

Allowable Non-Storm Water Discharges, drinking fountain water, 1.2.2.2.3, page 17050, first column. Alcoa does not believe drinking fountain water should

automatically be considered an allowable non-storm water discharge. While there will be instances where this can be acceptable, it has been Alcoa's experience that drinking fountain drains in manufacturing areas can be problematic. Most of our manufacturing facilities discharge their sanitary wastewater to the local POTW. Nearly all sewer use ordinances require sanitary sewage from facilities connected to the municipal sewer system be discharged to the sewers. A number of these ordinances list drinking fountain drains as a source of sanitary wastewater. This is not surprising since many areas of the country have adopted national building code regulations as their local building codes. The 1993 Building Officials and Code Administrators (BOCA) National Plumbing Code mandates that the water distribution and drainage system of any structure in which plumbing fixtures are installed shall be connected to public water and sewer, respectively, where available. (See General Regulations, Section P-304.0, page 13, The BOCA National Plumbing Code/1993.) Chapter 12 of the 1993 BOCA National Plumbing Code lists drinking fountains as a plumbing fixture. (See Section P-1211.0, page 52.) It can lead to confusion if the MSGP specifically states that drinking fountain water can be discharged through the plant's storm water drains but the local ordinance requires that same water to be discharged to the sanitary sewers. Section 9.13.2 of the MSGP Standard Permit conditions requires compliance with all other environmental statutes or regulations.

Alcoa recommends the wording "drinking fountain water and" be removed from Section 1.2.2.2.3 of the MSGP, and the reference cite only "potable water including water line flushings". For those instances where it may be appropriate to have drinking fountain water as an approved non-storm water discharge, EPA should consider specific BMP measures. These measures could include such things as the placing of signs indicating where the drinking fountain drain discharges and the prohibition of any liquids other than the drinking fountain water from being poured down the drain. This should be discussed in the preamble to the final permit or in a storm water fact sheet, rather than in the MSGP itself.

Alcoa requests that this potential conflict with local sewer use ordinances, municipal building, and/or plumbing codes be reviewed and the permit language modified accordingly. A suggestion would be to revise Part IV.A.3 to add the following after drinking fountain water:

where such discharges do not conflict with any local sewer use ordinance, municipal building ordinance or codes, or plumbing ordinance or codes.

Comment 6: Page 13, Part IV.A, Non-Storm Water Discharges

EPA's MSGP authorizes more non-storm water discharges than those listed in this Section of the Industrial General Permit. Alcoa requests that this section of the permit be modified to include all of the EPA authorized non-storm water discharges, by adding the following language:

- *Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);*
- *Routine external building wash down which does not use detergents;*
- *Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).*

Comment 7: Page 19, Part VIII.D.3. – Incorporate or reference the elements of other plans in the SWPPP

Alcoa would like to point out to the SWRCB that USEPA has been encouraging the development of comprehensive release reporting and countermeasure plans that incorporate release reporting under the various environmental laws and regulations into one document, generically referred to as an integrated contingency plan (ICP). EPA published notice of its guidance on developing an ICP in the June 5, 1996 *Federal Register*. Alcoa has developed such a comprehensive plan based on EPA's ICP concept, called the Release Prevention Contingency and Countermeasure (RPCC) Plan, which incorporates all such release reporting that affects a site, including the SWPPP for general storm water permits. Alcoa recommends that the following language be added after Part VIII.D.3.b., to recognize facilities that have an acceptable ICP:

Part VIII.D.3.c:

Facilities that have prepared a comprehensive release reporting plan that conforms with EPA's guidance on integrated contingency plans (ICP) that incorporates the provisions of Part VIII SWPPP Requirements in their entirety (as required) shall comply with that plan.

Comment 8: Pages 22 to 26, Part VIII.H.1 – Minimum BMPs

While Alcoa generally agrees a listing of BMPs can assist a facility in determining which may be applicable to reducing/eliminating pollutant loadings into storm water discharges at given location, Alcoa does not agree that they should be mandatory at every California industrial facility. The Draft Fact Sheet on page 18 states that Regional Board staff noted during inspections of dischargers' facilities "significant variation among each discharger's interpretation of what BMPs constitute BAT and BCT" – not a surprising observation given the diversity of industries and their sizes and locations covered by the general permit. However, nowhere in the Fact Sheet does it state that this variation in interpretation is causing receiving water issues or that any analysis was conducted to determine if the various interpretations did not provide BAT/BCT levels of control. Even EPA has stated that under the promulgated ELG regulations found at Subchapter N – 40 CFR 405 to 471 - facilities do not

need to install the same model treatment train (treatment systems) utilized in the development of the ELG as long as the promulgated effluent limits are achieved.

Alcoa requests that the permit make clear that it is not necessary for every listed minimum BMP to be incorporated into a facility's SWPPP unless a need for it is demonstrated to comply with BAT/BCT levels of control.

Comment 9: Pages 30 to 34 – NAL/EPA Benchmark Values

In addition to the discussion of the appropriateness of EPA benchmark values, Alcoa makes the following comment regarding benchmark values and the advisability of having a procedure to modify such values.

EPA developed the parameter benchmark values for the 1995 MSGP and subsequently revised some of them for the renewal 2000 MSGP, and reaffirmed their use in the 2008 MSGP. In all instances, EPA emphatically declared that parameter benchmark values are not effluent limits, nor should they be adopted as such. On page 50825 of the preamble to the *Federal Register* in which EPA published the 1995 MSGP, EPA wrote:

The benchmark concentrations are not effluent limitations and should not be interpreted or adopted as such.

Source: *FR*, vol. 60, no. 189, September 29, 1995, page 50825

In 2000, EPA reemphasized its intention that the parameter benchmark values are not to be considered effluent limits.

The benchmark concentrations are not effluent limitations and should not be interpreted or adopted as such.

Source: *FR*, vol. 65, no. 210, October 30, 2000, page 64767

SWRCB is relying on EPA's benchmark values, some of which were derived from specific state water quality standards, and may not be applicable to California. Alcoa does not believe that one number for a given benchmark can be adequate for all discharge locations in California, given the variability in flow volumes from different industrial sites even in the same vicinity. Likewise, a single benchmark value is not adequate for every size storm event generating runoff that occurs in the state. Exceeding a benchmark value does not necessarily indicate a problem with the controls a discharger has in place, as the circumstances surrounding that exceedance must be evaluated; that is, how much above the benchmark value was the monitoring result, how much rainfall occurred during the sampling event, what was the overall stream water level during the sampling event, what is the size and overall quality of the receiving stream, and so forth. Finally, a single grab sample taken within the first four hours of a precipitation event and comparing that to a single benchmark value will not be representative of every precipitation event that occurs. EPA expressed similar

views with regard to the MSGP, as the following excerpts from the 2000 MSGP and its supporting documentation show:

- *"An exceedance of a benchmark value does not, in and of itself, constitute a violation of this permit. While exceedance of a benchmark value does not automatically indicate that violation of a water quality standard has occurred, it does signal that modifications to the SWPPP may be necessary."*
- *"...analytic levels considerably above benchmark values can serve as a flag to the operator that the SWPPP needs to be reevaluated and that the pollutant loads may need to be reduced."*
- *"The results of benchmark monitoring are primarily for your use to determine the overall effectiveness of your SWPPP in controlling the discharges of pollutants to receiving waters..."*
- From the preamble to the 2000 MSGP, EPA said the following, with regard to exceeding a benchmark value: *"In many cases operators can, upon receipt of analytic monitoring results above benchmarks, still conclude their present SWPPPs/BMPs are adequately protective of water quality, or that other situations such as discharging to low-quality, ephemeral streams may obviate the need for SWPPP/BMP revisions."*

Alcoa believes that the Industrial General Permit should contain language that allows dischargers to develop alternate site-specific benchmark values for evaluating the effectiveness of the storm water pollution prevention plan. This approach would allow a discharger the choice of either using the benchmark values in the permit or to develop meaningful site-specific criteria for the pollutants of concern, or to develop alternate methods of determining the effectiveness of the SWPPP. Alcoa proposed such language to the State of Tennessee during the 2002 renewal of the Tennessee multi-sector general permit for industrial storm water discharges and to the State of Arkansas during the 2004 renewal of the Arkansas general permit for industrial storm water discharges. Both states have accepted this alternate benchmark development in addition to the federal EPA benchmark values. The permit language submitted to Tennessee is shown below and is in italics for emphasis. Please note that cut-off concentrations are the same thing as parameter benchmark values and the references to specific parts of the permit are based on Tennessee's permit formatting.

3. In lieu of using the listed cut-off concentrations, a permittee may develop either alternate cut-off concentrations, or other alternate means of determining equivalent compliance to using the cut-off concentrations listing in the various Sectors in Part XI of this permit.

a) The Storm Water Pollution Prevention Plan must contain a full and complete description of the alternative(s) to the established cut-off concentrations listed in this permit, along with the justification for the selected alternative(s), why the alternative(s) is considered equivalent to the listed cut-off concentrations (if the permittee is establishing a different value than the established cut-off concentration value), how the alternative(s) will be

evaluated to determine equivalency with the established cut-off concentrations (including where the permittee is establishing different parameters to measure SWPPP effectiveness than those listed under the applicable Sector in Part XI of this permit, or establishing alternatives that are completely different than any of the established cut-off concentrations in the Sector, including alternatives which do not utilize sampling), and documenting on an annual basis the permittee's ability to successfully achieve the alternative(s) to the established cut-off concentrations.

b) The alternative(s) to the established cut-off concentrations must take into account the following factors:

(1) Protection of the promulgated stream classification;

(2) Protection of the stream sediments;

(3) Ensure the storm water discharges do not cause an impairment of the receiving waters, including any localized impairment;

(4) Ensure the storm water discharges do not cause any human health effects from the ingestion of fish and other aquatic life;

(5) Ensure the storm water discharges do not result in the inability of the receiving waters to support and maintain recreational uses as designated in the appropriate stream classification.

c) The permittee shall submit the section of the SWPPP with the alternative(s) and the rationale to the State for review, by submitting it to the Division's local Environmental Assistance Center. The State shall review and approve the alternatives, and notify the permittee of such approval in writing. The State shall have 60 days to review the alternatives. If, after 60 days, the State has not notified the permittee of its review findings, the permittee may begin to use the alternative(s) to the established cut-off concentrations. If the State does not approve the alternatives(s), the permittee shall follow the provisions of Part VI.C.3.e below.

d) The alternative(s) to the established cut-off concentrations shall be evaluated annually. If this annual review demonstrates that the permittee is not achieving the alternative(s) to the established cut-off concentrations, the permittee must inform the Division's local Environmental Assistance Center in writing within 30 days from the time of the determination of not achieving the alternative(s). Furthermore, within 60 days of the date the permittee became aware that its discharges are not achieving the alternative(s), the permittee must:

(1) review its storm water pollution prevention plan, make any modifications or additions to the plan which would assist in reducing specific substances in the storm water discharges to ensure achievement of the alternative(s) to the cutoff concentrations for that facility, and

(2) Submit to the Division's local Environmental Assistance Center a brief summary of the proposed SWPPP modifications (including a timetable for implementation). New owners shall review the existing plan and make appropriate changes using the same timetable as described above. Amendments and modifications to the plan may be reviewed by the Division in the same manner as in Part IV.B.

e) Should the Division determine that a permittee's alternative(s) to the established cut-off concentrations are not effective in achieving the same goals as the cut-off concentrations either upon initial submission of a request for alternative(s) to the established cut-off concentrations or anytime during the term of this permit, the permittee after receiving written confirmation of the Division's determination of inadequacy shall institute sampling and achievement of the established cut-off concentrations as described in Part IV.C.2 above until such time as satisfactory alternative(s) to the established cut-off concentrations are developed and implemented as described in Part IV.C.3 above. The permittee must notify the Division in writing of the development of any new or revised satisfactory alternative(s) if the existing alternative(s) are found to be ineffective under the provisions of this paragraph.]

Alcoa requests that the Industrial General Permit be modified to include an alternate benchmark value development procedure, and that wording be added to this section of the permit that allows a discharger to evaluate whether or not a monitoring event that results in the exceedance of a benchmark value is sufficient to trigger all the requirements in this condition. Alcoa believes the exact procedure(s) for developing any such alternates should not be specified in the permit; rather, the general approach outlined above should be included with the exact procedure(s) to be determined based on site-specific circumstances.

Comment 10: Incorporating Alcoa's February 2, 2005 Comments into This Comment Letter

Alcoa submitted fourteen comments on the 2005 draft California general permit renewal effort. To the extent those comments apply to this version of the draft renewal permit, Alcoa reaffirms those comments and makes them a part of this comment letter. Those comments are attached to the end of these comments.

Comment 11: Federal Storm Water Association Comments

Alcoa is a member of the Federal Storm Water Association (FSWA), and endorses and incorporates the FSWA comments into this comment letter by reference.

Comment 12: Reserving Alcoa's right to add to or modify these comments after their submittal

Alcoa reserves its right to submit additional comments, or modify these comments, after they are submitted.

Alcoa appreciates this opportunity to provide comments on the proposed renewal industrial general permit. Alcoa would be willing to meet with SWRCB staff to discuss these issues and the State's storm water program. Please call John D. Morton at 412-553-2996 or by e-mail at john.morton@alcoa.com if you have any questions or wish to set up a meeting.

2005 Alcoa Inc. Comments on the Prior California Industrial General
Permit Renewal Effort

Alcoa Inc. Comments
On the Reissuance of the National Pollutant Discharge Elimination System General
Permit for Discharges of Storm Water Associated with Industrial Activities
General Permit No. CAS000001

Alcoa Inc. (hereinafter referred to as Alcoa), the world's largest producer of aluminum, wishes to make the following comments to the State Water Resources Control Board (hereinafter referred to as SWRCB) on the draft renewal of the California National Pollutant Discharge Elimination System general permit for discharges of storm water associated with industrial activities (hereinafter referred to as the Industrial General Permit). Alcoa has manufacturing operations in 41 countries worldwide, and in over 35 states in the U.S. Alcoa industrial facilities in California that either are directly affected or may be affected by this Industrial General Permit are located in Carson, Fullerton, Simi Valley, Torrance, City of Industry, Visalia, and Irvine. The permitting of storm water from industrial sites is becoming more complex as additional experience is gained under the national program and delegated states programs. In addition, nearly 10 years of experience with the use of general permits for storm water discharges show certain assumptions and methods of permitting have not been as successful or appropriate as when they were originally developed and imposed on dischargers. Alcoa believes these learning experiences at the national level and in other delegated states should be evaluated for inclusion or exclusion under the Industrial General Permit.

Alcoa has commented on the recent renewal of general permits for the discharge of storm water associated with industrial activities in the states of Tennessee, Arkansas, South Carolina, Pennsylvania, and Georgia. Alcoa also filed appeals of the issuance of the final general permits in Tennessee, Arkansas, South Carolina, and Pennsylvania. Settlement agreements, both final and tentative, have been reached in the Tennessee, Arkansas, and South Carolina permit appeals, and settlement negotiations with Pennsylvania are ongoing. Our comments to this Industrial General Permit include our experience with the appeals and settlement discussions in these delegated states.

Comment 1: Page 2, SWRCB Finding 8 – Compliance with 40 CFR 122.44(i)(3) and (4), related to minimum monitoring requirements

Alcoa does not believe these federal storm water monitoring requirements must apply to NPDES general permits, as this finding seems to imply. The language in these two sections of 40 CFR 122.44 states these monitoring conditions "shall be established on a case-by-case basis", which seems intended for individual NPDES permits and not necessarily for general permits. Indeed, EPA's general storm water permit, the multi-sector general permit or MSGP, does not require a minimum of once per year monitoring. When EPA issued the MSGP in 1995, a number of industrial sectors - including those potentially covered by effluent limitation guidelines in 40 CFR Subchapter N - were required to only monitor in years 2 and 4 of the general permit. The 2000 MSGP renewal continued this monitoring schedule in the general permit. Alcoa requests this Finding be revised

to reflect that it is not based on federal storm water permit monitoring requirements.

Comment 2: Page 3, Part I.1, Discharge Prohibitions

It is not clear what the first sentence of this condition applies to. The sentence reads "Except as allowed under Section IV. Non-Storm Water Discharges, discharges of liquids or materials other than storm water (non-storm water discharges), either directly or indirectly to waters of the United States, are prohibited." Does the phrase in parentheses (non-storm water discharges) apply to the discharge of liquids or materials, and is meant to prohibit non-storm water discharges containing pollutants that are not listed in Section IV.1, or does it in some fashion apply to storm water containing these substances? Alcoa requests this condition be revised to add clarity as to its meaning.

Comment 3: Page 4, Part IV.1.c, Non-Storm Water Discharges, drinking fountain water

Alcoa would like to point out that allowing the discharge of drinking fountain water from a drain may violate the local sewer use ordinance, plumbing ordinance, and/or building code ordinance, which could result in confusion since the Industrial General Permit at Finding 6 states that nothing in the permit preempts or supersedes the authority of municipal agencies to "restrict, or control storm water discharges and *authorized non-storm water discharges*" (emphasis added). EPA proposed the same type of non-storm water discharge be authorized under the MSGP when it was renewed in 2000, and Alcoa commented that providing a blanket allowance for these types of discharges might not be advisable. EPA agreed, and did not include drinking fountain water as an allowable non-storm water discharge in the final permit. Below are the pertinent parts of the comment Alcoa submitted to EPA on this issue:

Allowable Non-Storm Water Discharges, drinking fountain water, 1.2.2.2.3, page 17050, first column. Alcoa does not believe drinking fountain water should automatically be considered an allowable non-storm water discharge. While there will be instances where this can be acceptable, it has been Alcoa's experience that drinking fountain drains in manufacturing areas can be problematic. Most of our manufacturing facilities discharge their sanitary wastewater to the local POTW. Nearly all sewer use ordinances require sanitary sewage from facilities connected to the municipal sewer system be discharged to the sewers. A number of these ordinances list drinking fountain drains as a source of sanitary wastewater. This is not surprising since many areas of the country have adopted national building code regulations as their local building codes. The 1993 Building Officials and Code Administrators (BOCA) National Plumbing Code mandates that the water distribution and drainage system of any structure in which plumbing fixtures are installed shall be connected to public water and sewer, respectively, where available. (See General Regulations, Section P-304.0, page 13, The BOCA National Plumbing Code/1993.) Chapter 12 of the 1993 BOCA National Plumbing Code lists drinking fountains as a plumbing fixture. (See Section P-1211.0, page 52.) It can lead to confusion if the MSGP specifically states that drinking fountain water can be discharged through the plant's storm water drains but the local ordinance requires that same

water to be discharged to the sanitary sewers. Section 9.13.2 of the MSGP Standard Permit conditions requires compliance with all other environmental statutes or regulations.

...

Alcoa recommends the wording "drinking fountain water and" be removed from Section 1.2.2.2.3 of the MSGP, and the reference cite only "potable water including water line flushings". For those instances where it may be appropriate to have drinking fountain water as an approved non-storm water discharge, EPA should consider specific BMP measures. These measures could include such things as the placing of signs indicating where the drinking fountain drain discharges and the prohibition of any liquids other than the drinking fountain water from being poured down the drain. This should be discussed in the preamble to the final permit or in a storm water fact sheet, rather than in the MSGP itself.

Alcoa requests that this potential conflict with local sewer use ordinances, municipal building, and/or plumbing codes be reviewed and the permit language modified accordingly.

Comment 4: Page 4, Part IV.1.c, Non-Storm Water Discharges

EPA's MSGP authorizes more non-storm water discharges than those listed in this Section of the Industrial General Permit. Alcoa requests that this section of the permit be modified to include all of the EPA authorized non-storm water discharges, by adding the following language:

- Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- Routine external building wash down which does not use detergents;
- Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

Comment 5: Pages 5 to 7, Parts V.6 and V.7 – Permit requirements are identical for not being in compliance

The permit requirements are identical for violating a water quality standard (Part V.6) as they are for exceeding a parameter benchmark value (Part V.7). This would appear to imply the same weight and gravity for each type of non-compliance, even though the parameter benchmark values are the same as EPA's, and EPA is emphatic that their parameter benchmark values should not be used as effluent limits. See Alcoa's Comment 6 below for further information. Alcoa requests that these two conditions not contain the same requirements.

Comment 6: Page 6 and 7, Part V.7 - Exceeding USEPA benchmark values

EPA developed the parameter benchmark values for the 1995 MSGP and subsequently revised some of them for the renewal 2000 MSGP. In both instances, EPA emphatically declared that parameter benchmark values are not effluent limits, nor should they be adopted as such. On page 50825 of the preamble to the *Federal Register* in which EPA published the 1995 MSGP, EPA wrote:

The benchmark concentrations are not effluent limitations and should not be interpreted or adopted as such.

Source: *FR*, vol. 60, no. 189, September 29, 1995, page 50825

In 2000, EPA reemphasized its intention that the parameter benchmark values are not to be considered effluent limits.

The benchmark concentrations are not effluent limitations and should not be interpreted or adopted as such.

Source: *FR*, vol. 65, no. 210, October 30, 2000, page 64767

SWRCB is relying on EPA's benchmark values, some of which were derived from specific state water quality standards, and may not be applicable to California. Alcoa does not believe that one number for a given benchmark can be adequate for all discharge locations in California, given the variability in flow volumes from different industrial sites even in the same vicinity. Likewise, a single benchmark value is not adequate for every size storm event generating runoff that occurs in the state. Exceeding a benchmark value does not necessarily indicate a problem with the controls a discharger has in place, as the circumstances surrounding that exceedance must be evaluated; that is, how much above the benchmark value was the monitoring result, how much rainfall occurred during the sampling event, what was the overall stream water level during the sampling event, what is the size and overall quality of the receiving stream, and so forth. Finally, a single grab sample taken in the first 60 minutes of a precipitation event and comparing that to a single benchmark value will not be representative of every precipitation event that occurs. EPA expressed similar views with regard to the MSGP, as the following excerpts from the 2000 MSGP and its supporting documentation show:

- *"An exceedance of a benchmark value does not, in and of itself, constitute a violation of this permit. While exceedance of a benchmark value does not automatically indicate that violation of a water quality standard has occurred, it does signal that modifications to the SWPPP may be necessary."*
- *"...analytic levels considerably above benchmark values can serve as a flag to the operator that the SWPPP needs to be reevaluated and that the pollutant loads may need to be reduced."*
- *"The results of benchmark monitoring are primarily for your use to determine the overall effectiveness of your SWPPP in controlling the discharges of pollutants to receiving waters..."*

- From the preamble to the 2000 MSGP, EPA said the following, with regard to exceeding a benchmark value: *"In many cases operators can, upon receipt of analytic monitoring results above benchmarks, still conclude their present SWPPPs/BMPs are adequately protective of water quality, or that other situations such as discharging to low-quality, ephemeral streams may obviate the need for SWPPP/BMP revisions."*

Alcoa believes that the Industrial General Permit should contain language that allows dischargers to develop alternate site-specific benchmark values for evaluating the effectiveness of the storm water pollution prevention plan. This approach would allow a discharger the choice of either using the benchmark values in the permit or to develop meaningful site-specific criteria for the pollutants of concern, or to develop alternate methods of determining the effectiveness of the SWPPP. Alcoa proposed such language to the State of Tennessee during the 2002 renewal of the Tennessee multi-sector general permit for industrial storm water discharges and to the State of Arkansas during the 2004 renewal of the Arkansas general permit for industrial storm water discharges. Both states have accepted this alternate benchmark development in addition to the federal EPA benchmark values. The permit language submitted to Tennessee is shown below and is in italics for emphasis. Please note that cut-off concentrations are the same thing as parameter benchmark values and the references to specific parts of the permit are based on Tennessee's permit formatting.

3. In lieu of using the listed cut-off concentrations, a permittee may develop either alternate cut-off concentrations, or other alternate means of determining equivalent compliance to using the cut-off concentrations listing in the various Sectors in Part XI of this permit.

a) The Storm Water Pollution Prevention Plan must contain a full and complete description of the alternative(s) to the established cut-off concentrations listed in this permit, along with the justification for the selected alternative(s), why the alternative(s) is considered equivalent to the listed cut-off concentrations (if the permittee is establishing a different value than the established cut-off concentration value), how the alternative(s) will be evaluated to determine equivalency with the established cut-off concentrations (including where the permittee is establishing different parameters to measure SWPPP effectiveness than those listed under the applicable Sector in Part XI of this permit, or establishing alternatives that are completely different than any of the established cut-off concentrations in the Sector, including alternatives which do not utilize sampling), and documenting on an annual basis the permittee's ability to successfully achieve the alternative(s) to the established cut-off concentrations.

b) The alternative(s) to the established cut-off concentrations must take into account the following factors:

- (1) Protection of the promulgated stream classification;*
- (2) Protection of the stream sediments;*

(3) *Ensure the storm water discharges do not cause an impairment of the receiving waters, including any localized impairment;*

(4) *Ensure the storm water discharges do not cause any human health effects from the ingestion of fish and other aquatic life;*

(5) *Ensure the storm water discharges do not result in the inability of the receiving waters to support and maintain recreational uses as designated in the appropriate stream classification.*

c) *The permittee shall submit the section of the SWPPP with the alternative(s) and the rationale to the State for review, by submitting it to the Division's local Environmental Assistance Center. The State shall review and approve the alternatives, and notify the permittee of such approval in writing. The State shall have 60 days to review the alternatives. If, after 60 days, the State has not notified the permittee of its review findings, the permittee may begin to use the alternative(s) to the established cut-off concentrations. If the State does not approve the alternatives(s), the permittee shall follow the provisions of Part VI.C.3.e below.*

d) *The alternative(s) to the established cut-off concentrations shall be evaluated annually. If this annual review demonstrates that the permittee is not achieving the alternative(s) to the established cut-off concentrations, the permittee must inform the Division's local Environmental Assistance Center in writing within 30 days from the time of the determination of not achieving the alternative(s). Furthermore, within 60 days of the date the permittee became aware that its discharges are not achieving the alternative(s), the permittee must:*

(1) *review its storm water pollution prevention plan, make any modifications or additions to the plan which would assist in reducing specific substances in the storm water discharges to ensure achievement of the alternative(s) to the cutoff concentrations for that facility, and*

(2) *Submit to the Division's local Environmental Assistance Center a brief summary of the proposed SWPPP modifications (including a timetable for implementation). New owners shall review the existing plan and make appropriate changes using the same timetable as described above. Amendments and modifications to the plan may be reviewed by the Division in the same manner as in Part IV.B.*

e) *Should the Division determine that a permittee's alternative(s) to the established cut-off concentrations are not effective in achieving the same goals as the cut-off concentrations either upon initial submission of a request for alternative(s) to the established cut-off concentrations or anytime during the term of this permit, the permittee after receiving written confirmation of the Division's determination of inadequacy shall institute sampling and achievement of the established cut-off concentrations as described in Part IV.C.2 above until such time as satisfactory alternative(s) to the established cut-off concentrations are developed and implemented as described in Part IV.C.3 above. The permittee must notify the Division in writing of the development of any new or revised satisfactory alternative(s) if the existing alternative(s) are found to be ineffective under the provisions of this paragraph.]*

Alcoa requests that the Industrial General Permit be modified to include an alternate benchmark value development procedure, and that wording be added to this section of the permit that allows a discharger to evaluate whether or not a monitoring event that results in the exceedance of a benchmark value is sufficient to trigger all the requirements in this condition. Alcoa believes the exact procedure(s) for developing any such alternates should not be specified in the permit; rather, the general approach outlined above should be included with the exact procedure(s) to be determined based on site-specific circumstances.

Comment 7: Page 9, Part VII.3.c.ii – Incorporate or reference the elements of other plans in the SWPPP

Alcoa would like to point out to the SWRCB that USEPA has been encouraging the development of comprehensive release reporting and countermeasure plans that incorporate release reporting under the various environmental laws and regulations into one document, generically referred to as an integrated contingency plan (ICP). EPA published notice of its guidance on developing an ICP in the June 5, 1996 *Federal Register*. Alcoa has developed such a comprehensive plan based on EPA's ICP concept, called the Release Prevention Contingency and Countermeasure (RPCC) Plan, which incorporates all such release reporting that affects a site, including the SWPPP for general storm water permits. Alcoa recommends that the following language be added to the end of Part VII.3.c., to recognize facilities that have an ICP:

Part VII.3.c.iii:

Facilities that have prepared a comprehensive release reporting plan that conforms with EPA's guidance on integrated contingency plans (ICP) that incorporates the provisions of Part VII SWPPP Requirements in their entirety (as required) shall comply with that plan.

Comment 8: Pages 12 and 13, Part VII.8 – Minimum BMPs

While generally agreeing with principle of the minimum BMPs contained in this section, Alcoa does not believe that the Industrial General Permit should specify how often inspections are to be done (see Part VII.8.i(1) and ii(2)). Once per week could be too frequent, or in certain instances, too infrequent, depending on the manufacturing operations, receiving stream, and the site's existing environmental management system requirements (ISO 14000 or other EMS). Alcoa recommends that the language at the beginning of each of these two sections be modified to read "*Based on site-specific circumstances as documented in the SWPPP, inspect on a regular basis...*"

Comment 9: Page 17, Part VII.10.e – Seven day notification of any permit non-compliance

This requirement is too restrictive, as it may take more than a week to determine if permit non-compliance has actually occurred. In addition, the subsections under this permit condition appear to all relate to the implementation of the SWPPP, and not the entire permit. Regardless, the language at the beginning of this section should be modified to read (with the added language in italics): "Dischargers shall report any non-compliance with the *SWPPP* or Permit within *fourteen* days of discovering the non-compliance as follows:"

Comment 10: Pages 17 through 23, Part VIII – Monitoring and reporting requirements

Alcoa has a number of comments regarding this section of the permit.

- A. Part VIII.3.e requires recording any storm event that occurred during operating hours that did not produce a discharge. Alcoa does not understand what possible use this type of information can be for the discharger or the SWRCB. Indeed, since there is no impact to the receiving stream because there is no discharge of storm water, the NPDES permitting program really has no jurisdiction over these events. Alcoa requests that Part VIII.3.e be eliminated from the Industrial General Permit.
- B. Part VIII.3.f requires dischargers to perform a visual inspection of anticipated storm events. Again, the question is why, if Part VII.8.i.(1) and ii.(2) are mandating weekly inspections that appear to cover the same areas of the facility. Would this condition even apply with the previously mentioned inspections, since the last sentence states that the pre-storm visual inspection does not have to be performed if one was done fourteen days prior, again using the currently proposed weekly inspection schedule in Part VII. Alcoa believes the term "anticipated storm event" is too nebulous to use in a permit condition. Alcoa requests that Part VIII.3.f be eliminated from the Industrial General Permit.
- C. Part VIII.4.c specifies in subpart iv., "Parameters indicating the presence of pollutants that may be causing or contributing to an existing exceedance of a WQS in the facility's receiving stream". How would a facility know when such a situation existed? Alcoa requests that language be added that the SWRCB must notify the discharger in writing whenever this situation existed before any such monitoring became effective.
- D. Part VIII.4.f discusses procedures a discharger is to follow if a benchmark value is exceeded. Alcoa requests that this section of the permit be modified to take into account the comments presented in Comment 4 above.
- E. Part VIII.6 requires a one-time pollutant scan of a suite of parameters, for the express purpose (as stated in the Fact Sheet) of developing effluent limits for the next permit. Alcoa does not believe this is adequate justification for

mandating this type of sampling. The existing permit has been in effect since 1997, but the Fact Sheet makes no mention of any evaluation of this data. Does it support such a permit condition of every discharger, or are there only selected industrial categories in specific areas that might need this type of sampling?

- E. Part VIII.7.d mandates sampling from all drainage areas. EPA's MSGP allows for representative sampling from one outfall if two or more outfalls contain similar type of storm water. Alcoa requests similar language be inserted here. While the permit allows combining the sample results from up to 4 outfalls into one combined sample, typically a higher cost is incurred by collecting samples from multiple outfalls due to the resources required, not analyzing the samples.
- F. In general, Alcoa does not believe SWRCB has provided sufficient information for the public to determine if all of the monitoring required in Part VIII is justified. The Fact Sheet alludes to the 1999 9th Circuit Court decision in *Defenders of Wildlife v. Browner*; however the issue isn't whether industrial discharges consisting of storm water must comply with water quality standards. The issues include but are not limited to, do water quality standards for storm water discharges exist that are applicable to the wide range of storm water events that can occur at any given industrial site, and can meaningful effluent limits for storm water discharges be established. Alcoa does not believe there is sufficient technical information to adequately address these issues, and the Fact Sheet does not provide sufficient information to allow the public to determine if the SWRCB has resolved these types of issues to the point where collecting significant amounts of sample data is warranted at this time. EPA has issued guidance describing the technical difficulties in developing numeric storm water effluent limits in their September 1, 1996 memorandum titled "Interim Permitting Approach for Water Quality-Based Effluent Limits in Storm Water Permits". Alcoa believes the procedures and guidance EPA outlined in this memorandum should apply here as well. Alcoa requests that the SWRCB evaluate the existing data to determine if all of the monitoring proposed is adequate, make any appropriate changes to the monitoring requirements, and provide for public review and comment of this evaluation and any monitoring modifications made as a result of this evaluation prior to issuing the permit final. In addition, Alcoa requests the Fact Sheet be modified to include the current technical difficulty and uncertainty as to how to develop wet weather effluent limits that are applicable for all ranges of storm events for industrial facilities at this time.

Comment 11: Page 24, Table VIII.1 – Additional Analytical Parameters

These additional analytical parameters appear to be based on EPA's 2000 MSGP. Alcoa requests the ability to develop alternate analytical parameters to the ones

listed in this table, using procedures similar to those outlined in Comment 4 above.

Comment 12: Page 25, Table VIII.2 – Parameter Benchmark Values, Test Methods, Detection Limits and Reporting Units

Alcoa request the ability to develop alternate parameter benchmark values to the ones listed in this table, using procedures similar to those outlined in Comment 4 above.

Comment 13: Pages 29 through 31 – Conditional Exclusion Requirements

While Alcoa agrees in principle with the “no exposure” conditional exclusion, a number of implementation, interpretation, and compliance issues persist that neither the federal “no exposure” process nor the SWRCB conditional exclusion requirements address. For example, the SWRCB is allowing all industrial facilities to take advantage of the “no exposure” exclusion, just as the federal program does. Neither program, however, has changed the definition of storm water associated with industrial activity. Both programs state that storm water associated with industrial activity includes (among other things) final products, for facilities covered under paragraphs (1) through (9) of the definition (see Attachment 1 of the permit), and therefore, a facility must obtain a permit. However, under both programs, if a facility elects the conditional exclusion (no exposure certification under the federal program), final products exposed to storm water are no longer considered “exposed”. This provides a very large exemption to one discharger that another does not enjoy, even though they may produce the exact same finished product. Alcoa requests the SWRCB clarify how the conditional exclusion will work for the following situations.

- A. How will the SWRCB handle non-storm water flows such as air conditioning condensate, fire protection test waters, and other such flows which are currently authorized under the Industrial General Permit provided the permit conditions are met, at facilities that opt for the conditional exclusion? Most of these types of flows have historically been directed to the storm water drainage system at industrial sites. Facilities electing the conditional exclusion will then either need to ensure these discharges contain no pollutants, do not discharge to the storm water drainage system, or obtain an individual permit for them. The conditional exclusion provisions do not address this situation and can lead those industries electing it to have a false sense of compliance, if these types of flows are not adequately addressed. Another option would be for the SWRCB to develop a general permit for these types of flows, similar to the existing general permit the SWRCB developed for utility underground vaults. EPA historically has interpreted the need to permit these types of flows, if they are not included in the general storm water permit. The 1987 amendments to the Clean Water Act (CWA) required EPA to

conduct a study on *de minimus* discharges. In their report to Congress in 1991, EPA stated there were basically two ways to address *de minimus* discharges: (1) amend the CWA to exempt certain *de minimus* discharges or (2) develop general permits to cover generic categories of *de minimus* discharges. Since the CWA hasn't been revised to exempt any discharges other than the original exemptions in the 1972 amendments, EPA has developed several general permits (including general permits for industrial and construction storm water discharges).

Below is another example of EPA's interpretation and guidance on non-storm water discharges that shows these flows need to be permitted. Note that this includes the comment number from EPA's publication.

39. Do storm water construction general permits authorize non-storm water discharges?
- A. Under EPA's storm water construction general permits, issued on September 9, 1992, and September 25, 1992, the following non-storm water discharges are conditionally authorized (57 FR 41219) and (57 FR 44419): discharges from fire fighting activities; fire hydrant flushings; waters used to wash vehicles or control dust; potable water sources including waterline flushings; irrigation drainage; routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents. These discharges, except for flows from fire fighting activities, must be identified in the pollution prevention plan and the plan must address the appropriate measures for controlling the identified non-storm water discharges. Other non-storm water discharges not listed above or not identified in the storm water pollution prevention plan, must be covered by a different NPDES permit. (Emphasis added)

Source: EPA NPDES Storm Water Program Question and Answer Document, Volume II, July 1993

Alcoa requests the SWRCB develop a general permit for these types of flows, or develops some other permitting opportunity that will allow dischargers electing the conditional exclusion the ability to ensure the non-storm water discharges are properly regulated.

- B. If a facility opts for the conditional exclusion and subsequently has material or activities exposed to storm water, what does that do to the exclusion? Under the federal program, such an event results in the exclusion no longer applying (see 40 CFR 122.26(g)(3)(iii)). The No Exposure Certification form does not give an indication what happens in

this instance. Can the facility that loses the exclusion because of exposure re-apply for the "no exposure" exclusion in the future? If so, under what conditions, and what timeframe? Alcoa requests that the SWRCB provide sufficient explanation on how the no exposure certification process is to be administered, so that facilities opting for it (or attempting to evaluate if it should opt for it) have a clear understanding how it is to work and what the ramifications could be for failing to maintain a condition of no exposure at all times.

To address some of these issues, Alcoa requests the SWRCB consider incorporating the following conditions into Part X of the Industrial General Permit

- a. *For as long as the no exposure exclusion applies to the facility, any non-storm water discharge authorized under this general permit, as set forth in Part IV.1 above, must either be permitted under an individual NPDES permit or any general permit developed by the SWRCB for such discharges, or these non-storm water discharges must not be allowed to be discharged off-site to a receiving stream.*
- b. *The facility is to develop and maintain a no exposure management system that ensures no exposure will occur for the life of the no exposure exclusion period, or 5 years, whichever is shorter. Any such system is to include adequate safeguards, best management practices, periodic storm water management program reviews, site inspections, and maintenance schedules to ensure no exposure at all times.*
- c. *Exposure is defined as storm water coming into contact with the activities identified in Attachment 3 – Definitions - of this permit (storm water associated with industrial activity) that discharges off-site to a receiving stream. Should a potential condition of exposure be identified during non-storm periods and the facility is satisfied that the potential exposure occurred after the last known precipitation event and the facility can address the situation such that no exposure is again assured prior to the next storm event, then this would not be a condition of exposure. (An example would be finding a rip in a tarp covering material stored outside that is discovered and repaired prior to the next storm event that generates runoff, and the facility knows that the tarp was not ripped before the last known storm event).*
 - 1). *If exposure occurs, the facility must apply for permit coverage for its storm water discharges, either under this general*

permit, an individual NPDES permit, or an alternate general permit, no later than 30 days after the exposure occurs.

- 2). *If the facility cannot definitively determine if exposure occurred in a particular instance, but has reason to believe exposure probably did occur, then the facility must apply for either this general permit, an individual NPDES permit, or an alternate general permit for its storm water discharges, within 30 days of making that determination.*
- 3). *A facility that elects no exposure and subsequently has exposure cannot reapply for the no exposure exclusion again for the remainder of the life of this permit unless it can demonstrate that the condition causing exposure has been remedied so that exposure will not occur again. Documentation to this effect must be attached to the No Exposure Certification and be made available to the SWRCB upon request.*
- d. *The SWRCB reserves the right to revoke a facility's no exposure exclusion status if, after a site inspection or through other investigations, it determines the facility cannot justify the no exposure exclusion or cannot demonstrate to the satisfaction of the SWRCB that exposure has not occurred. If the SWRCB revokes the no exposure exclusion, the facility must apply as soon as possible for this general permit, an individual NPDES permit, or an alternate general permit. The SWRCB decision to revoke a facility's no exposure exclusion status shall be subject to administrative review pursuant to California regulations and law.*

Alcoa also recommends the No Exposure Certification form and instructions be modified to include language similar to that above. Specifically, Alcoa requests the following changes to the form:

- a. Add the above italicized language to the Instructions portion of the No Exposure Certification form, as a separate section, or incorporating it where appropriate into the current instructions.
- b. Add the following questions to Section IV. EXPOSURE CHECKLIST.
 12. *All allowable non-storm water discharges covered under General Permit CAS000001 identified in Part IV.1 have either been eliminated (prevented from discharging off-site via surface water) or permitted with an individual permit or under an alternate general permit.*

13. The facility has developed a comprehensive management plan to ensure that adequate inspections and oversight is provided to prevent exposure of industrial activities to storm water during the life of this certification.

- c. Revise the introductory paragraph to C. EXPOSURE CHECKLIST to read, with the changes indicated in italics:

*Are any of the following materials or activities exposed to precipitation now or in the foreseeable future? (Please check either "YES" or "NO" in the appropriate box. **If you answer "YES" to any of the following questions (1) through (11), then your facility is not eligible for the No Exposure Certification. If you answer "NO" to either question (12) or (13), then your facility is not eligible for the No Exposure Certification.***

- d. Add the following two sentences to the end of the second paragraph of Section V. Certification:

I understand that all non-storm water discharges must be either eliminated (prevented from discharging off-site into surface waters) or permitted under an NPDES permit or alternate general permit. I understand my facility must develop and maintain a management plan to ensure no exposure of industrial activity to storm water, and have adequate evaluation procedures in place that ensures no exposure for the life of this certification. I further understand that when the no exposure status no longer exists at my facility I must obtain coverage under an NPDES permit prior to any point source discharge of storm water from the facility.

Comment 14: Reserving Alcoa's right to add to or modify these comments after their submittal

Alcoa reserves its right to submit additional comments, or modify these comments, after they are submitted. Alcoa understands that the comment period may be extended beyond the current deadline of February 3, 2005, but that announcement may be made at the February 3rd public hearing. Alcoa must mail these comments by February 2 to ensure they are received at the SRWCB by the current deadline.

Alcoa appreciates this opportunity to provide comments on the proposed renewal industrial general permit. Alcoa would be willing to meet with SWRCB staff to discuss these issues and the State's storm water program. Please call John D. Morton at 412-553-2996 or by e-mail at john.morton@alcoa.com if you have any questions or wish to set up a meeting.