



ALSTON + BIRD LLP
WWW.ALSTON.COM

Stormwater Regulation Seminar

Monday, April 4, 2011



ALSTON + BIRD LLP
WWW.ALSTON.COM

Application of the New Permit to Industrial Facilities

Susan Paulsen
Flow Science, Inc.





Outline

- Permit History
- Nature of Stormwater
- Key Changes from Last Permit
- Implementation Features
- Permit Cost



ALSTON + BIRD L.L.P.



Permit History

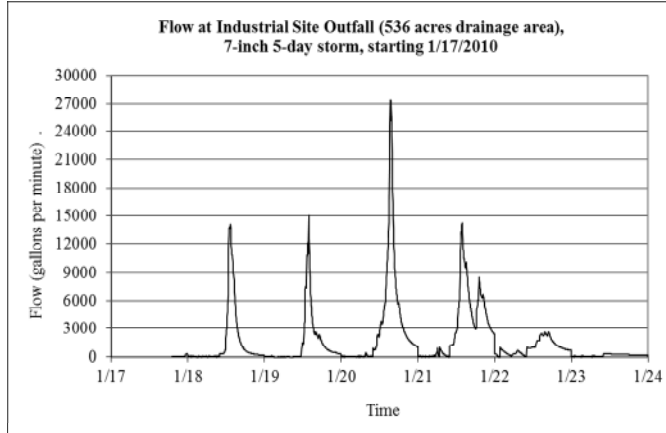
- 1991: First IGP order (modified in 1992)
- April 1997: Order 97-03-DWQ adopted
- 2003-2005: Prior draft IGPs
- 2006: Blue Ribbon Panel Report
- January 2011: Draft IGP
- Fall 2011: Revised draft IGP
- Winter 2011-2012: Adoption



ALSTON + BIRD L.L.P.



Flow Rates and Volumes are Highly Variable

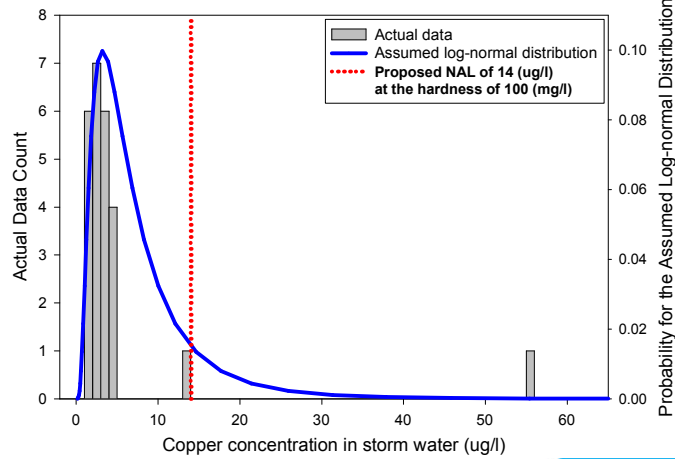


FLOW SCIENCE®

ALSTON + BIRD L.L.P.



Constituent Concentrations are also Highly Variable

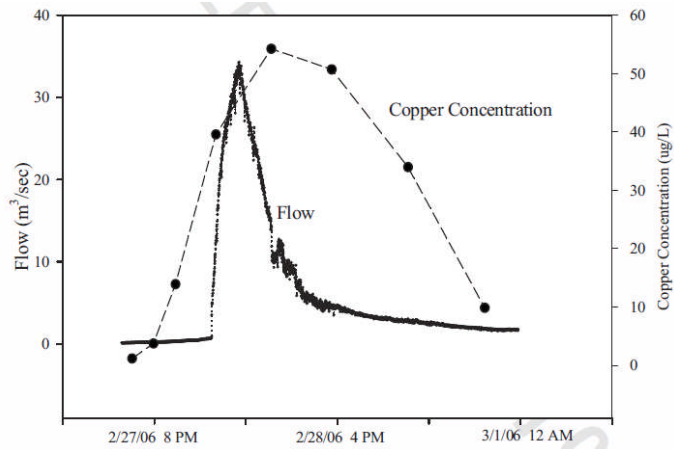


FLOW SCIENCE®

ALSTON + BIRD L.L.P.



Stormwater from Open Space is Variable, Exceeds Proposed Limits



FLOW SCIENCE®

ALSTON + BIRD LLP

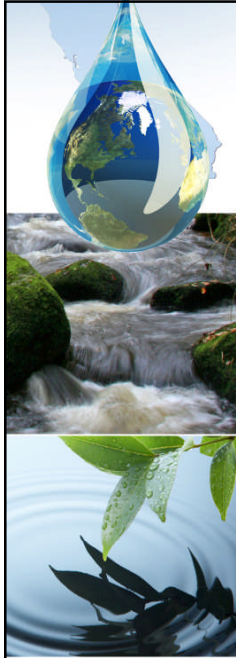


Key Changes from the Last Permit

- Electronic filing requirements
- Light industry also requires coverage
- Numeric action levels and numeric effluent limits
- Minimum BMPs
- New qualifications and training requirements
- Monitoring and reporting requirements
- Group monitoring removed

FLOW SCIENCE®

ALSTON + BIRD LLP



Do I need coverage, and how do I obtain coverage?



ALSTON + BIRD L.L.P.



Who Needs Coverage?

- Facilities subject to 40 CFR Subchapter N
- Manufacturing facilities: SICs 20XX through 39XX, 4221 through 4225
- Oil & gas/mining facilities: SICs 10XX through 14XX
- Hazardous waste treatment, storage or disposal facilities, including Subtitle C of RCRA
- Landfills, land application sites and open dumps
- Recycling facilities SICs 5015 and 5093
- Steam electric power generating facilities
- Transportation facilities SICs 40XX through 45XX (except 4221-25) and 5171
- Sewage or wastewater treatment works



ALSTON + BIRD L.L.P.



How to Obtain Coverage?

- Discharger must electronically file in SMARTS Permit Registration Documents (PRDs) prior to the operation of new industrial activity, or to continue coverage from prior permit
- PRD consists of:
 - Notice of Intent (NOI)
 - Site Map
 - SWPPP
 - Annual Fee
 - Signed Certification Statement



ALSTON + BIRD L.L.P.

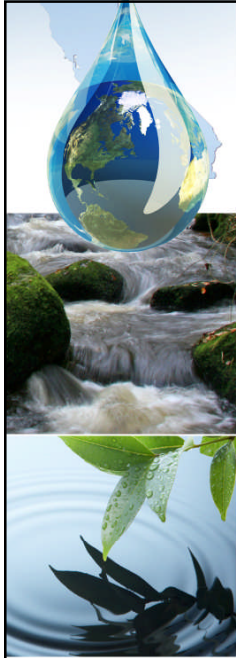


Conditional Exclusions

- No exposure
 - All industrial materials and activities are protected by a storm-resistant shelter
 - All pollutant sources must be evaluated and determined as having no exposure
- No discharge certification
 - No discharge up to a 100-year 24-hour storm event
 - Requires annual evaluation and renewal by the RWQCB
 - Requirements to be developed
- Green storm water impact reduction technology (G-SIRT)
 - No details yet



ALSTON + BIRD L.L.P.



What monitoring and reporting is required?



ALSTON + BIRD L.L.P.



How do I Determine which Constituents to Monitor?

- Parameters include:
 - pH, specific conductance, TSS, and oil and grease (or TOC)
 - Plus parameters:
 - Identified via pollutant source assessment,
 - Additional SIC-specific,
 - 303(d) listed,
 - Required by RB, and
 - 40 CFR Subchapter N
 - Receiving water hardness, for direct discharges or indirect discharge to 303(d)-listed waters



ALSTON + BIRD L.L.P.



Monitoring Requirements

- Qualifying storm event (QSE)
 - 1/4" or more rainfall measured on-site
 - Preceded by two days dry weather
- Monitoring frequency
 - Level 0 or Level 1: one per quarter
 - Level 2: twice per quarter
 - Level 3: all Qualified Storm Events
- Sample a first day of a QSE during facility operating hours



ALSTON + BIRD L.L.P.



Monitoring Requirements *(Continued)*

- Visual monitoring required for:
 - Presence of non-storm water discharges (quarterly during dry weather)
 - First QSE of each month during first 4 hr of determining that discharge is from QSE
 - Discharge of stored or contained storm water
 - Presence or absence of floating and suspended materials, oil and grease, discoloration, turbidity, odor, trash/debris, source of observed pollutant(s)
 - All storm water drainage areas, and storm water storage and containment areas, prior to any anticipated event
 - Records must be kept
- On-site rain gage
 - Record any storm events of less than 1/4", or larger events with no discharge



ALSTON + BIRD L.L.P.



Monitoring Requirements (Continued)

- Additional monitoring for facilities with significant land disturbances
 - Mining and quarrying category, metal mining category, landfills, land application sites, and open dumps
 - Sample all days of a QSE
- NA facility is not required to collect samples or conduct visual monitoring
 - During dangerous weather conditions such as flooding and electrical storms
 - Outside of scheduled operating hours
- Group monitoring is not allowed



ALSTON + BIRD L.L.P.



Reporting Requirements

- Submit analytical results to SMARTS within 30 days
- Annual report to the RWQCB
 - Summary and evaluation of all sampling and analysis results
 - Original laboratory reports and summary of analytical method, method reporting unit, and method detection limit of each analytical parameter
 - Annual Comprehensive Facility Compliance Evaluation Report
 - Summary of all corrective actions taken during the compliance year, identification of any compliance activities or corrective actions that were not implemented



ALSTON + BIRD L.L.P.



What are numeric action levels (NALs) and numeric effluent limits (NELs)?



ALSTON + BIRD L.L.P.



Proposed Numeric Action Levels

Parameters	Unit	NAL
pH	pH units	6.0-9.0
Suspended Solids (TSS), Total	mg/L	100
Specific Conductance (S/C)	umhos/cm	200
Oil & Grease (TOG), Total	mg/L	15
Organic Carbon (TOC), Total	mg/L	110
Zinc, Total (H)	mg/L	0.26
Copper, Total (H)	mg/L	0.0332
Lead, Total (H)	mg/L	0.262
Chemical Oxygen Demand	mg/L	120
Aluminum, Total (pH 6.5-9.0)	mg/L	0.75
Iron, Total	mg/L	1
Nitrate + Nitrite	mg/L as N	0.68



ALSTON + BIRD L.L.P.



Proposed Numeric Action Levels (Continued)

Parameters	Unit	NAL
Total Phosphorus	mg/L as P	2
Ammonia	mg/L	19
Magnesium, total	mg/L	0.0636
Arsenic, Total (c)	mg/L	0.16854
Cadmium, Total (H)	mg/L	0.0053
Nickel, Total (H)	mg/L	1.02
Mercury, Total	mg/L	0.0024
Selenium, Total	mg/L	0.2385
Silver, Total (H)	mg/L	0.0183
Biochemical Oxygen Demand	mg/L	30



ALSTON + BIRD L.L.P.



What Triggers an Exceedance?

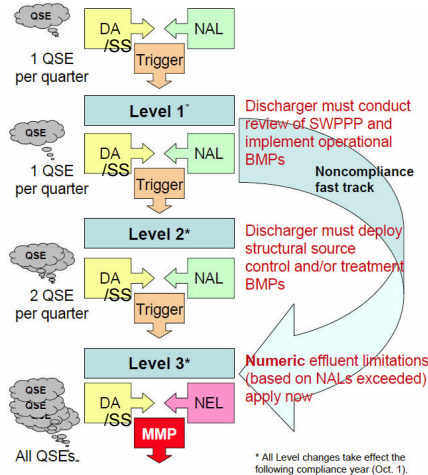
- Any one sample exceeds 2.5 x NALs,
- Daily average exceeds any two NALs in one qualifying storm, OR
- Daily average exceeds the same NAL in any two qualifying storms per reporting year



ALSTON + BIRD L.L.P.



What's Required if I do have an Exceedance?



FLOW SCIENCE®

ALSTON + BIRD LLP

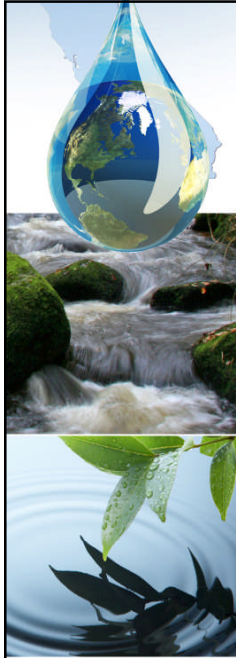


...but NALs are not appropriate for this use

- NALs are taken from USEPA's MSGP (2008)
 - USEPA determined numeric effluent limits aren't feasible with the exception of certain established ELGs
- Triggers, and actions that are required, are different than MSGP
 - MSGP uses long-term averages
 - MSGP considers natural background (i.e., there can be reasons not to meet MSGP benchmarks)
- SWRCB didn't follow process for developing appropriate numeric values (and doesn't have data to do so)

FLOW SCIENCE®

ALSTON + BIRD LLP



What minimum BMPs are required?



ALSTON + BIRD L.L.P.



Minimum BMP Requirements for all Sectors

- Good house keeping – 7 measures
- Preventative maintenance – 4 measures to reduce leaks and spills
- Spill response – 3 measures to prevent and respond to spills
- Material Handling and Waste Management – prevent discharge of waste
- Employee Training Program – 4 measures
- Erosion and sediment controls – structure and non-structural measures to stabilize exposed areas and contain runoff
- Record Keeping and QA
- Visual inspections – pre-storm, monthly, quarterly



ALSTON + BIRD L.L.P.



What about certification requirements?



ALSTON + BIRD L.L.P.



Qualified SWPPP Developer (QSD)

- Writes and amends the SWPPP
- Must take a QSD training course
- Registered civil engineer, geologist, landscape architect, or hydrologist
- Must approve each amendment or revision to SWPPP



ALSTON + BIRD L.L.P.



Qualified SWPPP Practitioner (QSP)

- Facility personnel
- Oversee the implementation of the SWPPP, BMPs, and monitoring requirements
- Must take a QSP training course



ALSTON + BIRD L.L.P.



Anticipated Costs for an Individual Facility (preliminary estimates)

- Anticipated Level 0 costs range up to \$29,400 per facility per year
 - Contrast to existing costs for monitoring group participants of \$500-1,700
- Additional costs for Levels 2-3: unknown, likely \$30,000-\$100,000 per facility for first iteration
- CASQA estimates \$7.2 million for QSP training, excluding labor
- LLNL anticipates hiring one full-time position to meet inspection requirements for 2 facilities



ALSTON + BIRD L.L.P.



723 E. Green St., Pasadena, CA 91101

Phone: (626) 304-1134

Fax: (626) 304-9427

www.flowscience.com

Susan C. Paulsen, Ph.D., P.E.

spaulsen@flowscience.com

Vada K. Yoon, DEnv

vaday@flowscience.com



ALSTON + BIRD LLP



ALSTON + BIRD LLP
WWW.ALSTON.COM

Storm Clouds over California the Draft Industrial General Permit

Sharon Rubalcava

Alston & Bird LLP





Overview

- Clean Water Act -- Stormwater Regulation
- Exceedances of Numeric Standards
- Penalties
- What happens if you can't comply with the numeric standards
- Enforcement "Opportunities"
- Key Legal Issues
- How to Participate



ALSTON + BIRD L.L.P.

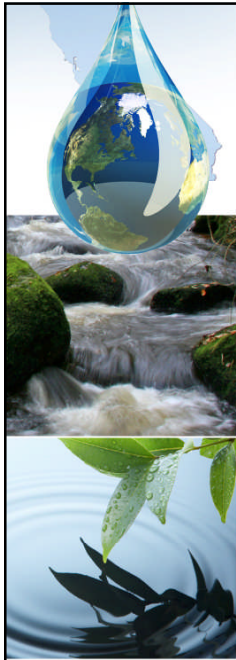


Clean Water Act

- Applies to discharges of pollutants to "waters of the US"
- Initial application to point sources – must have permits (NPDES)
- Permits issued by EPA or states with delegated authority
 - Technology-based effluent limits
 - Water quality-based effluent limits



ALSTON + BIRD L.L.P.



CWA Regulation of Stormwater Discharges

- 1987 amendments added program for certain sources of stormwater discharges
 - Discharges associated with industrial activity
 - Discharges from municipal separate storm sewers
 - Discharges determined to contribute to violations of WQS or a significant contributor to waters of the US
- Covered stormwater dischargers must get either a general or individual NPDES permit
- Stormwater includes snow or rain runoff and surface runoff and drainage



ALSTON + BIRD L.L.P.



Industrial Dischargers

- Defined in 40 CFR § 122.26(b)(12) – includes industrial yards, access roads, material handling sites and storage areas, storage of raw materials
- Must meet best-available technology (toxics)/best conventional technology (conventional pollutants e.g. BOD, TSS, coliform, pH, oil and grease) and additional limitations necessary to protect water quality unless exempt – CWA 301(b)(2) and (b)(1)(C)
- BAT and BCT can be implemented through BMPs (40 CFR §122.44(k))



ALSTON + BIRD L.L.P.



USEPA Regulation of Stormwater

- EPA's Multi-Sector General Permit
- SWPPPs
 - Specific management and monitoring requirements for industry sectors
 - Numeric effluent limits only for sources with Effluent Guidelines
 - If no Effluent Guideline, determine appropriate level of control using best professional judgment
 - "Because of the nature of stormwater discharges, it is infeasible to use numeric effluent limits to demonstrate the appropriate levels of control. In such situations, the CWA authorizes EPA to include non-numeric effluent limits in NPDES permits."



ALSTON + BIRD L.L.P.



Proposed New IGP Requirements

- Minimum mandatory BMPs for all facilities
- Numeric Action Levels (NAL) to monitor effectiveness of BMPs
- Numeric Effluent Limitations (NEL) if a NAL is exceeded
- New monitoring and reporting requirements



ALSTON + BIRD L.L.P.



Exceedances of NALs

- BMPs are in place/monitoring begins
- Level 0 – Discharge meets all NALs – facility is in compliance
- Triggers for corrective action
 - A daily average (DA) exceeds NAL twice (same parameter, consecutive events)
 - The DA for two parameters are exceeded (single storm event)
 - The DA is 2.5 times the NAL (single storm event)
 - Corrective action begins next compliance year



ALSTON + BIRD L.L.P.



Exceedances of NALs (Continued)

- Level 1 – begins in compliance year following exceedance of any trigger
 - Evaluate SWPPP and upgrade BMPs and source controls, if necessary
 - Report to Regional Board
- Level 2 -- if exceedances of same parameter continue, next compliance year
 - Sample two storm events/quarter
 - Consider and implement, if necessary, structural and treatment BMPs
- Level 3 – next compliance year
 - Enforceable Numeric Effluent Limits imposed



ALSTON + BIRD L.L.P.



Exceedance of NEL

- “... this General Permit’s corrective action system is designed to have a well-defined compliance end-point – either a Discharger will implement effective BMPs ... or become subject to mandatory enforcement.” Fact Sheet, p. 29



ALSTON + BIRD L.L.P.



Penalties

- Substantial penalties for violations
- Administrative civil liability – up to \$10,000 per violation
- Civil liability – up to \$25,000 per violation
- Minimum mandatory penalties of \$3000 per serious exceedance (Water Code §13385)
- Clean Water Act citizen suit penalties of up to \$37,500 per day



ALSTON + BIRD L.L.P.



What if ...

- Can't install a structural source control or BMP by the start of the next compliance year?
 - Can apply for a BMP Implementation Extension Request by August 1. Must be approved to be effective.
- Can't meet NEL despite structural source controls or treatment BMPs?
 - Can request suspension of NEL. Case-by-case determination based on not causing or contributing to an exceedance of a water quality standard and additional controls would not be reasonable.



ALSTON + BIRD L.L.P.

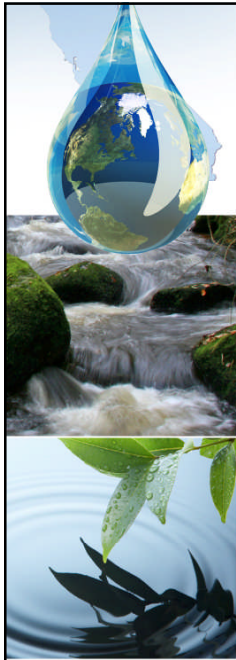


Exclusions from the IGP

- No Exposure Certification (NEC)
 - Must be renewed annually
- No Discharge Requirements
 - Facilities designed to contain a 100-year, 24-hour storm event
- Dischargers that implement Green Infrastructure Stormwater Impact Reduction Technology -- TBD



ALSTON + BIRD L.L.P.



Other Enforcement “Opportunities”

- Failure to file NOI or Conditional Exclusion
- Failure to conduct quarterly/annual visual inspections
- Failure to document inspections
- Failure to prepare, update or implement SWPPP
- Failure to have SWPPP on-site
- Failure to have a QSD or QSP
- Failure to train employees



ALSTON + BIRD L.L.P.



Enforcement (Continued)

- Failure to develop a site-specific sampling program
- Failure to conduct required sampling
- Failure to have Monitoring Program on-site for inspection
- Failure to implement a mandatory BMP or document that it is clearly inapplicable to the facility
- Failure to do quarterly sampling following exceedance of an NAL
- Failure to implement Level 1 or 2 corrective actions



ALSTON + BIRD L.L.P.



Key Legal Issues

- Are Numeric Action Levels de facto effluent limits because they must be met?
- Why is the State Board proposing numeric limits when its Blue Ribbon Panel and USEPA have found numeric limits for storm water to be infeasible?
- Is current technology capable of achieving compliance with NALs?
- Is the State Board required to demonstrate compliance is possible?
- What are the environmental impacts of all the BMPs necessary to achieve compliance? Should the State Board consider such impacts even though it is exempt from the requirement to prepare an EIR?
- Are the monitoring requirements unduly burdensome?



ALSTON + BIRD L.L.P.



Could it get Worse?

- Environmental groups testimony at last workshop:
 - Include more industries
 - Triggers are too weak -- want enforceable NELs now
 - Allow no excuses for non-compliance with NALs/NELs, e.g. facilities should be responsible for run-on, atmospheric deposition, natural disasters
 - 10-year design storm is too small
 - Require sampling whenever QSE occurs – regardless of operating hours
 - Monitor for all pollutants likely to be discharged
 - Put all reports on-line (so we can bring citizen suits)



ALSTON + BIRD L.L.P.



Next Steps

- Written comments on draft permit due April 18
- Coalitions forming to oppose new requirements
- Consider impacts to your facility/identify what may be required – costs may matter
- Participate in future workshops/task forces
- Stakeholder processes;
 - QSD/QSP training courses, requirements for conditional exclusion
- Watch for new draft in fall 2011 and repeat steps above



ALSTON + BIRD LLP



ALSTON + BIRD LLP
WWW.ALSTON.COM

Stormwater Regulation

*Lee DeHihns
Alston & Bird*





EPA November 12, 2010 Memorandum on TMDLs and WLAs for Stormwater Discharges

Providing Numeric Water Quality-Based Effluent Limitations in NPDES Permits for Stormwater Discharges

In today's memorandum, EPA is revising the 2002 memorandum with respect to water quality-based effluent limitations (WQBELs) in stormwater permits. Since 2002, many NPDES authorities have documented the contributions of stormwater discharges to water quality impairment and have identified the need to include clearer permit requirements in order to address these impairments. Numeric WQBELs in stormwater permits can clarify permit requirements and improve accountability and enforceability.



ALSTON + BIRD L.L.P.



NRDC v. County of Los Angeles, F.3d , (9th Cir.) 2011 WL 815099 (March 10, 2011)

- The levels of pollutants detected in four rivers: the Santa Clara River, the Los Angeles River, the San Gabriel River, and Malibu Creek (collectively, the Watershed Rivers) exceeded the NPDES permit limits for municipal separate storm sewer systems (MS4) discharges in the County.
- In the County, municipal MS4s are “highly interconnected” because the District allows each municipality to connect its storm drains to the District’s extensive flood-control and storm-sewer infrastructure (the MS4). The infrastructure includes 500 miles of open channels and 2,800 miles of storm drains.
- The Permit states “discharges from the MS4 that cause or contribute to the violation of the Water Quality Standards or water quality objectives are prohibited.”



ALSTON + BIRD L.L.P.



NRDC v. County of Los Angeles

- The court ruled that municipal stormwater dischargers are strictly liable for all stormwater runoff pollution at their monitoring stations, no matter the pollutants' origin.
- “Although the District argues that merely channeling pollutants created by other municipalities or industrial NPDES permittees should not create liability because the District is not an instrument of “addition” or “generation,” the Clean Water Act does not distinguish between those who add and those who convey what is added by others—the Act is indifferent to the originator of water pollution.”



ALSTON + BIRD L.L.P.



National Pork Producers Council v. U.S. E.P.A. F.3d ___, (5th Cir.) 2011 WL 871736 March 15, 2011

- In *Waterkeeper Alliance, Inc. v. Environmental Protection Agency*, 399 F.3d 486 (2d Cir.2005), the Petitioners asked the Second Circuit to vacate the 2003 Rule's “duty to apply” because it was outside of the EPA's authority. The court agreed and held that the EPA cannot require CAFOs to apply for a permit based on a “potential to discharge.” The Second Circuit explained that the plain language of the CWA “gives the EPA jurisdiction to regulate and control only actual discharges-not potential discharges, and certainly not point sources themselves.”



ALSTON + BIRD L.L.P.



National Pork Producers Council v. U.S. E.P.A.
F.3d __, (5th Cir.) 2011 WL 871736 March 15, 2011

- In response, EPA issued the 2008 Rule. It states that CAFOs “propose to discharge” if they are “designed, constructed, operated, or maintained such that a discharge would occur.” Also, each CAFO operator is required to make an objective case-by-case assessment of whether it discharges or proposes to discharge, considering, among other things, climate, hydrology, topology, and the man-made aspects of the CAFO. A CAFO can be held liable for failing to apply for a permit, in addition to being held liable for the discharge itself.



ALSTON + BIRD L.L.P.



National Pork Producers

- The 5th Circuit held: “These cases leave no doubt that there must be an actual discharge into navigable waters to trigger the CWA’s requirements and the EPA’s authority. Accordingly, the EPA’s authority is limited to the regulation of CAFOs that discharge. Any attempt to do otherwise exceeds the EPA’s statutory authority. Accordingly, we conclude that the EPA’s requirement that CAFOs that “propose” to discharge apply for an NPDES permit is *ultra vires* and cannot be upheld.”



ALSTON + BIRD L.L.P.



National Pork Producers (Continued)

- The Supreme Court has explained: “Agencies may play the sorcerer’s apprentice but not the sorcerer himself.” *Alexander v. Sandoval*, 532 U.S. 275 (2001). In other words, an agency’s authority is limited to what has been authorized by Congress. Here, the “duty to apply”, as it applies to CAFOs that have not discharged, and the imposition of failure to apply liability is an attempt by the EPA to create from whole cloth new liability provisions. The CWA simply does not authorize this type of supplementation to its comprehensive liability scheme. Nor has Congress been compelled, since the creation of the NPDES permit program, to make any changes to the CWA, requiring a non-discharging CAFO to apply for an NPDES permit or imposing failure to apply liability.”

