Delaware Air Program Review

On July 13th and 14th, 2005, reviewers from the Environmental Protection Agency (EPA) Region III Office of Enforcement and Permits Review (OEPR) conducted limited interviews and reviews of the Delaware Department of Natural Resources and Environmental Control (DNREC) air compliance monitoring and enforcement program files. OEPR reviewed most files in Dover on July 13th; OEPR reviewed additional files in DNREC's New Castle office on July 14th**.**

The Engineering and Compliance Program is one of six Sections and Branches under the Air Quality Management Program in DNREC's Division of Air and Waste Management. Most managers and staff in the Engineering and Compliance Program work out of DNREC's New Castle office and a few engineers/scientists and one manager works primarily out of DNREC's Dover office. Staff members in both offices have responsibility for writing permits as well as conducting inspections. DNREC officials believe that writing permits and conducting inspections provides their staff with a unique knowledge base and perspective that results in improved compliance.

In addition to the Engineering and Compliance group under the Air Quality Management Section, there is also an Air Surveillance group. Among other duties, the Air Surveillance group is responsible for measuring and reporting ambient concentrations of selected air pollutants, conducting special studies to address citizen concerns, conducts engineering reviews of the plans and methods used for all stack tests, reviews plans for the installation and subsequent testing of Continuous Emission Monitoring Systems, and conducts laboratory analyses of fuel oil and asbestos samples.

The Air Quality Management Program maintains the official compliance monitoring and enforcement files in its Dover office. These files are located in five-drawer cabinets in a hallway around the corner from the reception in the Priscilla Building**.** In addition, the Review Team found that certain active enforcement files were maintained in the offices of the inspectors and/or paralegals who were working on these cases.

An administrative staff person is responsible for central file maintenance, along with her other responsibilities. No file cabinets were locked; business confidential files were located throughout the respective source files.

Prior to the file review, OEPR informed DNREC of the 20 sources that had been selected for file review. These 20 sources included:

- four HPV files,
- four major source files where violations were found but the violation was not listed as an HPV,
- three synthetic minor files where violations were found but the violation was not listed as an HPV,

- three synthetic minor files where no violations were found, plus
- six major source files where no violations were found.

Sources within each category had been randomly selected. OEPR made minor modifications to the original source list after discussions with DNREC.

DNREC staff moved the selected files from the five-drawer cabinets to the rooms in Dover and New Castle that DNREC made available to reviewers for the file review. During the file review, individual reviewers found certain files to be incomplete and inquired whether additional files existed. In those instances, the paralegal assigned to the case provided additional files (e.g., Enforcement Panel or enforcement files) or the inspector who conducted the last compliance evaluation provided additional files from his/her office. In all fairness to DNREC, Region 3 was anxious to complete the air program file reviews due to pending staff reassignments, and only gave State officials three days to prepare for the review rather than the traditional two weeks that is recommended.

Element 1 - The Degree to which a State program had completed the universe of planned inspections (addressing core requirements and federal, State, and regional priorities).

Clean Air Act Source Universe	**Number of Sources in Universe in FY2004**
Universe of Major Sources (Title V)	65[1]
Universe of Synthetic Minor 80% Sources	79[2]
Universe of Synthetic Minor Sources	79[3]
Total Number of Major and Synthetic Minor Sources	134
Number of inspection files for review	20

[1]Metric 12a1: AFS operating majors w/air program code = V

[2]DNREC considers all synthetic minor sources to be 80% synthetic minor sources

[3]Metric 12b2

Data Metrics

		National Average or Total	DE
Metric 1a1	% of CAA active major sources receiving full compliance evaluation (FCE) by the state in FY2003/2004. State only.	75.7%	97.1%[4]
Metric 1a2	% CMS major sources receiving FCEs by the state in FY2003/2004. State only.	78.4%	97.1%[5]
Metric 1b	% CAA synthetic minor 80% sources (SM_80) FCE coverage in FY2002 through FY2004. State only.	69.2%	95.5%
Metric 1c2	% FCEs and reported PCEs for CMS SM sources (CMS SM sources with at least one FCE or reported PCE/all active CMS SM sources) _ FY2002 through FY2004. State only.	76.2%	98.6%
Metric 1f	% Review of self_certifications completed.	73.5%	83.1%
Metric 1g	Number of sources with unknown compliance status in US[6].	2,427	3

File Review Metric

Metric 1r	Percent of planned FCEs completed at major and SM-80 sources		17 FCE files to be reviewed
Metric 1r	Percent of planned FCEs completed at Subparts M, N, O, T, and X area MACT sources, FY1999 through FY2004.	NA	81% of current universe

Findings:

For this State Program Review, reviewers assessed DNREC's FY2004 CMS accomplishments. Note that DNREC's CMS Plan actually covers FY2004 and FY2005, in accordance with the CMS Strategy.

[4]Original metric was 94.4% (68/72). This includes, in both the numerator and denominator, one facility which came under the name of two owners as two sources and includes a minor source. Actual metric, 68/70 counts the facility with two owners once instead of twice and does not include the minor source.

[5]See above footnote. One facility with two owners, have since shut down and are no longer in the CMS Plan.

[6]As of 8/13/05

DNREC's Compliance Monitoring Strategy (CMS) commitments exceed national minimum suggested frequency of one Full Compliance Evaluation (FCE) every two years for major sources, one FCE every five years for SM-80 sources, and one FCE every three years for mega-sites, i.e., DNREC commits to complete an FCE at every major source once during FY2004 or FY2005, at every 80-percent synthetic minor source (SM-80) once during FY2004 or FY2005, and at its one mega-source once every three years.

All DNREC's FCEs include on-site visits. This frequency well exceeds the minimum frequency that is recommended in the CMS of one on-site visit every five years, provided that the state may effectively complete an FCE using self-reported information.

Actual FCE coverage well exceeds national averages of 75.7 percent for major Clean Air Act (CAA) active sources, 78.4 percent for major CMS sources, and 69.2 percent for SM-80 sources. However, DNREC did not meet its commitment to complete an FCE at its mega-source within three years reportedly due to workload issues. In fact, DNREC did not complete this FCE in four years (in FY2005) either. Also, DNREC had not completed an FCE at one other major source by the end of FY2004.

According to AFS[7], 95.5 percent of currently active SM-80 CAA sources in Delaware have had an FCE in the last three years. DNREC has indicated that this metric should actually be **97.1 percent** because one source had actually been inspected in FY2004 but this FCE was not successfully uploaded to AFS at the time the metrics were generated. Regardless, DNREC has well exceeded the national average of 69.2 percent. Please note that metric 1b and 1c cover three years because data is only available since FY2002, even though the CMS requires completion of an FCE at each SM-80 source every five years.

FCE and reported Partial Compliance Evaluation (PCE) coverage of **98.6 percent** for CMS synthetic minor sources in Delaware exceeds the national average of 76.2 percent.

DNREC reported review of **83.1 percent** of all Title V certifications received in FY2003, which exceeds the national average of 73.5 percent. Results appear to be entered properly. DNREC responded that actual reviews are likely to be higher than 83.1 percent but all reviews may not have been entered into AFS.

As part of DNREC's commitment under the Region 3 Area MACT[8] Source Implementation Plan, DNREC committed to inspect, between 1999 and 2004, all its area source dry cleaners, chrome electroplaters and halogenated solvent cleaners subject to Subparts M, N and T, respectively, of the MACT[9]. By the end of FY2004, DNREC had completed FCEs at all its dry

[7] AIRS Facility Subsystem, the national air compliance monitoring and enforcement tracking data system.
[8] Maximum Achievable Control Technology under 40 CFR Part 60.
[9] The Region III Area Source MACT Implementation Plan also included Subparts 0 and X of Part 63 (ethlene oxide sterilizers and lead smelters), but these area sources are not located in Delaware.

cleaner area sources, all of its operating area source chrome electroplaters and its one halogenated solvent cleaner area source.

In FY2004, DNREC committed to inspect 22 area source dry cleaner sources. According to DNREC's End-of-Year Report, DNREC actually inspected 70 dry cleaners, well in exceedence of its commitment. DNREC inspected one dry cleaner two times in FY2004. Region 3 would prefer that an FCE be reported only once per year in AFS and any follow-up inspections be reported as a PCE. Region 3 believes this is particularly important when all CMS commitments are not being satisfied. However, Region 3 recognizes that national policy and guidance does not preclude the reporting of multiple FCEs.

Citation of information reviewed for this criterion: CAA Stationary Source Compliance Monitoring Strategy, April 25, 2001.

Recommendations[10]:

(1) DNREC has committed to complete, in FY2006, an FCE at its one mega-source. Should DNREC continue to experience difficulties in completing its FCE at this mega-source on schedule, DNREC should consider redirecting resources to complete this commitment, such as by reducing its inspection frequency at SM sources where DNREC's FCE frequency commitments exceed that required in the CMS. During the first quarter of FY2005, DNREC did complete the FCE at the other major source which was overdue for an FCE.

Action: As of March, 2006, DNREC reports they are on schedule to complete the FCE for its outstanding megasource.

(2) **Federal Recommendation:** Although DNREC well exceeded the national average for completion of CMS commitments, AFS under-reports DNREC's accomplishments because certain EPA classes did not match state classes in AFS. To remedy this problem, processes should be employed to ensure that the EPA class is changed when state class is changed.

Action: Region III has recently enacted procedures to check changed state class in AFS and to make changes to EPA class where EPA has an action on facilities with such changes.

Element 2 - Degree to which compliance monitoring reports and compliance reviews document inspection findings, including accurate description of what was observed to sufficiently identify violations.

	Clean Air Act Source Universe Information	**Compliance Monitoring in FY2004**

[10] Recommendations herein apply to DNREC unless indicated as a "federal recommendation."

Metric12 d2	Full Compliance Evaluations - major and SM sources	111 FCEs[11]
Metric 12d3	Partial Compliance Evaluations	306
	Total Number of Evaluations	417
	Number of inspection files for review	20 files

File Review Metric

2a	% of CMRs or PCE reports adequately documented in the files	14/20 files = 70 %

For most files reviewed, compliance monitoring reports (CMRs) were very well organized and comprehensive. For sources with Title V permits, each permit condition was delineated and evaluated. Title V annual certifications, where Title V permits were in effect the previous year, were either included with the FCE or the report referenced where the Title V certification review may be found.

One CMR reviewed showed that the source was out of compliance. DNREC informed the company by letter of what they believed was a "deficiency" and not a significant violation. EPA reviewed the facts surrounding the reporting violation and concurred that the violation was neither significant, nor impeded the State's ability to determine compliance with the overall permit limit.

Deficiencies observed in CMRs included the following:

- Enforcement history usually was not included, even when violation had been discovered the previous year.
- General and facility information was lacking in some CMRs. For example, one CMR did not identify the product that the source manufactures, another did not include a process description, a third CMR did not describe the size of the units inspected, and a fourth CMR did not adequately describe the tank which was the source of a release.

[11] Metric 12d2

- One CMR did not reference all stack tests performed that year and did not mention that several Excess Emission Reports had been submitted that year.

According to the CMS, CMRs should include these items.

Three Title V certification reviews are listed in AFS as "in compliance" for FY2004, even though DNREC had notified the companies of deficiencies, which may also be violations, discovered that year. Reviewers noted three possible reasons for this discrepancy:

(1) DNREC's Title V certification forms do not explicitly ask the Title V source to report deficiencies from the previous year. Nonetheless, this is required in DNREC's semi-annual reports.

(2) EPA Guidance on whether to list a source as "out of compliance" as a result of its Title V certification review was reportedly not clear until Region 3's recent clarification. Specifically, if a source lists deficiencies or violations in its Title V certification review, the state/local agency should determine whether the deficiencies rise to the level of a violation. Agencies should enter the results of that Title V certification found to have violations as "MV" (in violation). Many states only were listing the results of a Title V certification as "in violation" if the source had inaccurately or incompletely filled out the form or had submitted the form late.

(3) Inspectors may have failed to note the previous year's minor deficiencies/violations when reviewing the Title V certification.

Citation of information reviewed for this criterion: See above for a description of the 20 files reviewed. Two of these files reviewed documented that violations were found from state activities that were neither FCEs nor PCEs.

The Evaluation Team reviewed FCEs performed in FY2004 as well as FCEs associated with the selected HPVs identified in prior years. Additionally, to evaluate timely and appropriate enforcement, FY2005 files were reviewed where FCEs in FY2004 resulted in violations being found but these were not addressed in FY2004.

Recommendations: (1) As set forth in the Compliance Monitoring Strategy, all CMRs should include enforcement history, especially recent enforcement history, to ensure that violations/deficiencies previously discovered are no longer occurring. CMRs also should include a summary of the facility including the product manufactured at the source, a general process description, size of the units inspected, and a detailed description of any units which were found to be in violation. CMRs should list excess emissions reported during the period under review along with all stack tests and results of stack tests.

Action: DNREC has updated its inspection report templates to include the above information. All inspectors are expected to use these templates when developing inspection reports.

(2) DNREC should conduct training or otherwise communicate to its inspectors that EPA requires Title V certification results to be listed as **"MV"** (in violation) if any violations are reported for the year covered in the certification, or DNREC officials independently conclude that the source was in violation during the reporting period.

Action: DNREC sent an e-mail to all Engineers and Scientists on February 27, 2006 notifying them of this requirement.

Element 3 - Degree to which compliance monitoring reports are completed in a timely manner, including timely identification of violations.

	Clean Air Act Source Universe Information	**Compliance Monitoring in FY2004**
Metric12d2	Full Compliance Evaluations	111
Metric 12d3	Partial Compliance Evaluations	306
	Total Number of Evaluations	417
	Number of inspection files for review	20

File Review Metric

Metric 3a	% CMRs or other report which identify potential violations in the file within 60 days	17/20 = 85%

The CMS requires that FCEs should include a review of all required reports, including stack tests, where there is no other means of determining compliance.

As of August, 2005, 25 out of 86 stack tests performed at major and synthetic minor sources in FY2004 are listed with results code "99." This usually means that the results are "pending."[12] According to DNREC, many of the stack test results in this metric were, at the time, still pending. For stack tests being conducted pursuant to 40 CFR Part 60, the test report is to be submitted within 180 days after the initial startup date or within 60 days after reaching maximum production rate. For those tests being conducted pursuant to 40 CFR Part 61, the test report is to be submitted within 31 days after completion of the test. If the test is being conducted pursuant to 40 CFR Part 63, the test report must be submitted within 60 days after the test is completed unless another time frame is specified in the applicable subpart. Thus, where results are still "pending" and reports were submitted in accordance with the above requirements DNREC's reviews do not appear to be timely. Should any of these stack tests show a failure, DNREC will

[12] In follow-up discussions with DNREC regarding the results of this Program Review, DNREC responded that some of the stack tests listed in the metric are not stack tests to determine compliance.

have failed to identify this violation in a timely manner. This is viewed as a significant vulnerability.

According to EPA's interpretation of the AFS Business Rules dated July, 2005, and taking effect officially on October 1, 2005, stack tests results should not be reported to AFS until the results of the test are known. Thus, according to EPA Headquarters, no "pending" results should be entered for stack tests in AFS. It should be noted that this EPA Headquarters position is under serious debate and consideration. However, EPA Regional Offices have little choice but to follow national guidance until such guidance is revised. In follow up discussions with State officials, DNREC agreed that "pending" results should not be listed for any stack test that was performed more than six months ago, as stack test reports should have been submitted and reviewed by the state officials within that time frame. If a source is required to re-test due to a problem with results reported, and if the stack test was to be completed by a date that has already passed, results should be entered in AFS as "in violation" and the company should be notified accordingly.

DNREC officials are of the opinion that stack testing not required by 40 CFR Parts, 60, 61 or 63 are not subject to the same schedules outlined in the rules. While Region 3 agrees that the "notification of a stack test" required by an operating permit or enforcement order may differ and be governed by the permit or order, the reporting date of a stack test and the pass/fail data elements are no different than that required by the CFR. Thus the MDR requirements are exactly the same.

Seventeen out of 19 files reviewed by the Evaluation Team included CMRs or PCE reports that were completed within 60 days after the actual inspection, based on comparing inspection dates and dates of the reports in the files. Two reports were finalized a few days later than 60 days after the actual inspection.

Citation of information reviewed for this criterion:

- The Timely & Appropriate (T&A) Enforcement Response to High Priority Violations (HPVs), June 23, 1999
- Final Clean Air Act National Stack Testing Guidance dated September, 2005
- DNREC Compliance Enforcement Response Guide, September 19, 2002.

See above for a description of the 20 files reviewed. One of the 20 files showed that the violation was documented in an internal memo rather than an FCE or PCE report.

FCEs performed in FY2004 were reviewed as well as FCEs associated with the selected HPVs identified in prior years. Additionally, to evaluate timely and appropriate enforcement, FY2005 files were reviewed where FCEs in FY2004 resulted in violations being found but these were not addressed in FY2004.

Recommendations: (1) Results of all stack tests should be entered in AFS in a timely manner.

Action: DNREC has instituted new procedures to ensure that all stack tests are entered in a timely manner.

Element 4 - Degree to which high priority violations and supporting information are accurately identified and reported to EPA national databases in a timely manner.

	Clean Air Act Source Universe information	**Number of Sources in Universe in FY2004**
Metric 12g1	New High Priority Violations in FY2004 - State only	15 DNREC-lead[13]
	Number of inspection files for review	20

Data Metrics

		National Average or total	**DE**
Metric 4a	FY2004 HPV Discovery Rate - (new HPVs/major sources with FCEs) - State only	10.6%	14.8%[14]
Metric 4b	FY2004 HPV Discovery Rate (new HPVs/active major universe) - State only	5.7%	12.3%[15]
Metric 4c	No activity indicator- HPV - State only	1269	9[16] sources that are new DNREC- or joint-lead HPVs
Metric 4d	Formal enforcement actions for non-HPVs/all reported formal enforcement actions in FY2004	21.8%	25%[17]

File Review Metric

Metric 4e	% HPV determinations that are identified in a timely manner	2/4 identified HPVs reviewed = 50%

[13]Metric 12g1

[14]Original metric was 11.3% but this omits a now-shut down HPV. Actual metric is 8/54 = 14.8%.

[15]Original metric was 8.8%, but the numerator did not include 2 facilities. Actual metric is 8/65 = 12.3%.

[16] Original metric listed only seven new DNREC or joint-lead HPVs, but this list did not include 2 facilities. A total of 15 new HPVs (nine sources) were DNREC or joint-lead HPVs in FY2004.

[17]This value does not include stipulated penalties that DNREC assessed in FY2004.

Metric 4f	% of HPV determinations that are accurately reported	4 HPVs identified/5 actual HPVs in the 20 files reviewed = 80%

Metric 4A - DNREC's HPV discovery rate (**14.8 percent** of FCEs) in FY2004 exceeded the national average by almost 40 percent. Please note that some HPVs were identified through PCEs and not FCEs, and this value is not reflected in the metric.

Metric 4B - DNREC identified HPVs at **12.3 percent** of Delaware's active major universe in FY2004. This exceeds, by more than 100 percent, the national average of 5.7 percent.

Of the seven files reviewed with violations that were not initially reported as HPVs, three violations appeared to rise to the level of an HPV. When the Team brought these violations to the attention of DNREC, DNREC managers explained clearly why two sources were not considered to be HPVs. Whereas the explanations provided were clear and convincing, no documentation of these decisions was found in the files for either source. DNREC agreed that the third violation should have been identified as an HPV and this was recently entered into AFS as such, in response to that determination. According to DNREC, their failure to list the actual HPV as such was an oversight on their part. This oversight appears to indicate that a more formal process within the AQM Engineering and Compliance office is needed to ensure that all HPVs are identified.

Metric 4E - Of the four HPV files selected for review, records show that DNREC identified two of these HPVs more than 60 days after Day 0. DNREC actually found one of these violations in FY2003, but Timely and Appropriate meeting records show extensive discussion between EPA and DNREC regarding which HPV criteria applied to this violation. Ultimately, EPA agreed in FY2004 to list this as an HPV under "discretionary" criteria. The second HPV was identified late because DNREC resampled coatings at this source five months after the original analysis to confirm results. Because of DNREC's protracted sampling efforts, the HPV was not actually identified until almost seven months after the original analysis.

According to EPA records of Timely and Appropriate meetings, of the 11 state-lead HPVs identified in FY2004, seven[18] were reported to EPA more than 45 days after Day Zero. Such late reporting is considered a vulnerability.

The DNREC inspector who conducted the on-site inspection writes the CMR and the first-line supervisor concurs upon the CMR. Those CMRs reviewed as part of the File Review did not indicate whether a violation found rose to the level of an HPV. One file contained an "AQM NOV Posting Memorandum" from the inspector and also signed by the first-line supervisor which specified that the violation is an HPV and listed the applicable HPV criteria. Reviewers did not find such documentation in the other three HPV files of when DNREC determined that a violation was an HPV. Furthermore, the Review Team was totally unaware of Posting

[18]See data metric 10a2.

Memoranda prior to the review. These documents have not been made available to the Delaware State Liaison Officer. Thus we would have no way of knowing when the State determined an HPV unless we were so advised.

According to *DNREC's Compliance Enforcement Response Guide*, Engineering and Compliance staff are required to determine whether the violation meets the definition of an HPV. However, specific means of documenting this determination are not specified in the Guide.

Citation of information reviewed for this criterion:

- The Timely & Appropriate (T&A) Enforcement Response to High Priority Violations (HPVs), June 23, 1999
- Minutes of FY2003 and FY2004 Timely and Appropriate meetings
- DNREC Compliance Enforcement Response Guide, September 19, 2002.

Recommendations:

(1) To ensure that all violations that rise to the level of an HPV are evaluated against the HPV criteria, the AQM Engineering and Compliance office should institute more formal processes to advise the EPA when exactly a violation is determined to be an HPV.

Action: DNREC has updated its template for the internal memo that accompanies NOVs to include an HPV Discussion section.

(2) DNREC should evaluate its processes used to determine whether a violation exists when the results of testing are not clear. If retesting is needed, this should occur in an expedient time frame in order to minimize the time when a source may be out of compliance.

Action: This recommendation was based on a one-time event related to a laboratory error. DNREC has resolved this problem with the laboratory and does not anticipate this problem to occur again.

(3) DNREC should evaluate why three HPVs were reported to EPA more than 120 days after Day Zero and assess how such late reporting may be avoided in the future. New HPVs can always be reported to EPA outside of the periodic Timely and Appropriate meetings. Notices of Violation **(for HPVs only)** are required to be sent on a monthly basis, so a simple transmittal form which identifies the violation as a new HPV, along with appropriate documentation of the basis for DNREC's determination, could serve as timely notification to EPA. The EPA then may evaluate the information provided, concur on the HPV recommendation, and enter the new HPV in AFS.

Action: DNREC is evaluating why these HPVS were reported late. In addition, DNREC's refined HPV determination process, described above as follow-up to Recommendation 1, and its

new process to review stack tests, described under Element 3, Recommendation 1, are expected to improve HPV reporting timeliness.

(4) DNREC should begin linking HPVs in AFS as soon as possible. Whereas EPA still is expected to concur on each HPV recommended by a state/local agency and must still receive the NOVs that document the violations, direct entry by DNREC would best ensure that the public, as well as the regulated community, is informed about high priority violations in a timely manner. EPA may then review DNREC's recent entries in AFS, compare the entry to the documentation provided by DNREC, and advise DNREC of any changes to AFS that may be needed regarding new HPVs.

Action: DNREC continues to work on programming that will enable DNREC to link HPVs in AFS. DNREC declined to estimate a date by when this may be accomplished.

Element 5 - The degree to which state enforcement actions include required corrective or complying actions (injunctive relief) that will return sources to compliance in a specified time frame.

Clean Air Act Source Universe Information	Number of Enforcement Actions
State formal enforcement actions	17 total at major and SM sources, of which 5[19] address HPVs
Number of enforcement files for review	Out of 20 files, 4 HPVs + 2 non-HPVs = 6 files with formal enforcement actions completed

File Review Metrics

Metric 5a	% formal state enforcement actions that contain a compliance schedule or activities designed to return source to compliance	6/6 = 100%
Metric 5b	% formal or informal enforcement responses that return sources to compliance	10/11 = 91%

Formal state enforcement actions were associated with four HPV files reviewed and two non-HPV files reviewed. All of these actions included activities designed to return the sources to compliance or documented that the source had already returned to compliance.
Eleven files reviewed included formal or informal enforcement responses. Ten of those files documented facilities' return to compliance where violations were found. The eleventh file included documentation regarding resolution of noncompliance for one of the two pollutants for

[19] Metric h1. In addition, 2 HPVs were addressed jointly in FY2004

a non-HPV but reviewers did not see documentation that the control system to address the second pollutant was successfully installed.

In several instances, files showed that the source had returned to compliance prior to the enforcement action being taken. Such action is commendable, since a rapid return to compliance is the main objective of the compliance monitoring program and appears to be consistent with the Principles for Compliance and Enforcement that are set forth in the *DNREC Compliance Enforcement Response Guide*.

Citation of information reviewed for this criterion:

- The Timely & Appropriate (T&A) Enforcement Response to High Priority Violations (HPVs), June 23, 1999

- DNREC Compliance Enforcement Response Guide, September 19, 2002.

See above for a description of the 20 files reviewed.

Recommendations: (1) When a source is listed as an HPV, formal procedures are set forth in the *Timely & Appropriate Policy* to ensure that violations are not only addressed but also resolved, i.e., all activities necessary to return a source to compliance, along with penalties paid, are complete. Some state/local agencies have formal protocols in place to formally close out all enforcement activities, regardless of whether a violation is an HPV or not an HPV. Region 3 advises that DNREC should evaluate its processes to close out enforcement files to better ensure that all activities necessary to return a source to compliance and to document DNREC's review of those close-out activities.

Action: DNREC has developed an Enforcement Close-out Template to document DNREC's review of close-out activities.

Element 6 - The degree to which a state takes timely and appropriate enforcement actions, in accordance with policy related to specific media.

Clean Air Act Source Universe Information	**Number of Enforcement Actions**
State formal enforcement actions	17[20] at major and SM sources
Formal enforcement actions at HPVs	7 by DNREC or jointly at HPVs
Number of enforcement files for review	20 files, of which 4 are HPVs and 7 are non-HPVs

[20] Original metric listed 19, but two were minor sources. The above chart focuses on HPVs, consistent with the T&A Policy.

Data Metric

		National Average	DE
Metric 6a	% sources that were HPVs for at least one month in FY2004 and that remained unaddressed >270 days	41.4%	58.3%[21]
Metric 6b	% of state-lead HPVs that were unaddressed as of 9/30/04 or were addressed in FY2004 but had exceeded the 270-day timeliness threshold.	58.8%	84.2% state & joint-only[22]
Metric 6c	All state formal actions taken during FY2004	2879	7 state or joint-lead HPVs[23] addressed in FY2004

[21]Original metric was 54.5% (6/11). Actual metric includes one facility in both the numerator and denominator (7/12).

[22]Original metric listed 85%, but actual ratio for state and joint lead HPVs is 16/19.

[23]Original metric 12h1 lists 19 total State formal enforcement actions. Metric listed above lists only those formal enforcement actions related to HPVs that were addressed by DNREC or jointly in the fiscal year.

DNREC addressed seven HPVs in FY2004, either as state or joint-lead enforcement. This should not be compared against the national average of 2879 total state or joint-lead formal enforcement actions, as only small percentage of those were taken at HPVs. Because the Timely & Appropriate Policy focuses on HPVs, this discussion addresses only HPVs.

58.3 percent of Delaware's state or joint-lead HPVs in FY2004 remained unaddressed for more than 270 days (see Metric 6a), compared to a national average of 41.4 percent. **84.2 percent** of Delaware's sources that were state or joint-lead HPVs at any time in FY2004 were not addressed within the 270-day time line specified in the Timely & Appropriate Policy or were unaddressed at the end of the fiscal year. This substantially exceeds the national average of 58.8 percent. Of the five sources that DNREC addressed in FY2004, the average number of days after Day 0 to address violations was 294 days. Only two of the HPVs addressed by DNREC in FY2004 were addressed within the 270-day time frame that is set forth in the *Timely & Appropriate Policy*. In addition to those five addressed HPVs, six state-lead HPVs that were HPVs in FY2004 continued to be unaddressed as of November 2005.

Reviewers consider DNREC's untimeliness in addressing HPVs to be DNREC's most significant vulnerability in the air enforcement program. According to DNREC, bottlenecks at the State Attorney General's (SAG) office were a primary reason for several delays. The reviewers recognize that SAG actions, and timing of these actions, are largely outside the control of DNREC. Once the Department refers a violation to the State Attorney General's Office, DNREC loses control over the enforcement action's timing until the Attorney General's Office review is complete. Another prevalent reason for delays was the Enforcement Panel's decisions to combine air violations with newer violations, from air or other media, into one enforcement action. This delay, as well, is recognized as being reasonable. In two instances, changes in permits that were needed to address HPVs were not made within the 270-day time frame. In one other case[24], complications with ongoing federal activities delayed enforcement action to address violations identified by DNREC.

Two of the three EPA-lead HPVs in Delaware in FY2004 remained unaddressed for more than 270 days. One of these two cases was a judicially referred case and is now addressed. The second continued to be unaddressed as of November 2005.

Reviewers identified one violation that appears to meet HPV criteria but was not identified by DNREC as an HPV in FY2004. DNREC has proceeded to take formal enforcement action against this violator and, since the State Program on-site review, has identified this source as an HPV. However, the formal enforcement action is still pending – well past the 270-day window to address HPVs under the *Timely and Appropriate Policy*.

According to the *DNREC Compliance Enforcement Response Guide*, an NOV, order, or consent order may be used to address an occurrence of noncompliance. The *Timely and Appropriate*

[24] A facility's first HPV has not been addressed due to difficulties related to determining whether violations are NSR/PSD violations. DNREC did not address another HPV due to possible complexities between this state-lead case and ongoing federal enforcement for other violations. The federal violations were addressed in June, 2005.

Policy requires that, in most cases, HPVs be addressed with formal enforcement actions other than NOVs. DNREC's failure to timely identify two HPVs, failure to address the first HPV in a timely manner, and failure to address the second HPV either in a timely or appropriate manner is viewed as a significant vulnerability.

Two files reviewed showed non-HPV violations addressed informally rather than with formal enforcement actions. Twenty-three major and synthetic minor sources were issued NOVs from DNREC in FY2004 and eleven sources[25] were subject to formal actions that year. DNREC may have discovered some of the violations at the eleven sources prior to FY2004. At least three formal enforcement actions are still pending for violations identified in FY2004. Thus, it appears that DNREC addresses a significant percentage of its non-HPV violators with informal actions. This is not inconsistent with the *Timely and Appropriate Policy*, as that policy only requires that non-HPVs be addressed "appropriately" but does not specify the enforcement mechanisms that are considered "appropriate" in those instances.

Citation of information reviewed for this criterion:

- The Timely & Appropriate (T&A) Enforcement Response to High Priority Violations (HPVs), June 23, 1999
- DNREC Compliance Enforcement Response Guide, September 19, 2002.

See above for a description of the 20 files reviewed.

Recommendations: (1) Reviewers strongly recommend that DNREC should review each of the above-reported reasons for delay, along with others that DNREC may identify, and implement changes in its enforcement procedures to ensure that HPVs are addressed in a more timely manner. DNREC should also discuss with EPA whether a referral to the State Attorney General's Office can be considered an addressing action under the Timely and Appropriate Policy.

Action: DNREC reports that the air enforcement "bottlenecks" encountered with State Attorney General's Office have been reduced substantially recently as a result of periodic coordination meetings that DNREC has initiated with the attorney assigned to DNREC's cases. In addition, DNREC is evaluating where else modifications to the enforcement process may be instituted to more quickly address both HPVs and other violations.

(2) DNREC should consider improved procedures to ensure that all violations are reviewed to determine if they meet HPV criteria and to document DNREC's HPV determinations for all major and SM sources found to be in violation. Whereas the CMS does not state that HPV determinations should be included in CMRs, if DNREC employs a Standard Operating Procedure to screen all violations against

[25] Metric 12h2

HPV criteria, the likelihood that DNREC would miss listing a source as an HPV is minimized.

Action: DNREC has revised its NOV internal memo template, as discussed in the follow-up under Program Element 4 and has revised its stack test review procedures, as discussed in the follow-up under Program Element 3 to ensure that HPVs are determined in a more timely fashion.

Element 7 - Degree to which the state includes both gravity and economic benefit calculations for all penalties, appropriately using BEN model or similar state model.

Clean Air Act Source Universe Information	Number of Enforcement Actions
State formal enforcement actions	17 at major and SM sources [26]
Number of enforcement files for review	20 files of which 4 are HPVs and 7 are non-HPVs

Metric a	Percentage of formal enforcement actions that include calculation for gravity and economic benefit.	70 %[27]

DNREC should be recognized for its clear guidance, in the *DNREC Compliance Enforcement Response Guide* as well as the templates and other Administrative Policy and Procedures, that address how to assess penalties. DNREC's guidance and policies very clearly state that gravity as well as economic benefit should be assessed as part of the penalty assessment process. DNREC's authority to be consistent with EPA's Penalty Policy by calculating economic benefit, as well as other factors, is set forth in 6 Del. C. Section 6005(b)(3). In the files where penalty assessments were documented, the basis for the initial penalty calculation was clear in all instances.

Seven out of ten files reviewed, where DNREC has initiated formal enforcement action, included documentation of initial penalty calculations. One of the three files that did not include penalty calculations was recently identified as an HPV as a result of the State Program file review. The *Clean Air Act Stationary Source Civil Penalty Policy* requires that penalties be calculated based on the economic benefit of noncompliance and the seriousness of the violation**.** This Policy, which the *DNREC Compliance Enforcement Response Guide* states is followed by DNREC, applies to all non-minor violations as well. Therefore, the absence of penalty calculation documentation in three of ten files reviewed is viewed as an area of vulnerability.

In many of the files reviewed where formal enforcement action had been taken, information on enforcement actions, including penalties assessed, was not included with the main files. Penalty information, where provided to Reviewers, was typically filed separately with the paralegal assigned to the case. Such separation of compliance monitoring files from enforcement files could hinder an inspector's ability to characterize the enforcement history of a source when completing a CMR. An incomplete enforcement history could hinder an inspector's ability to conduct the requisite follow-up at units that may have been problematic in the past.

Citation of information reviewed for this criterion:

[26] Original metric 12h1 lists 19, but this value includes two minor sources.

[27] Seven out of ten actions where formal enforcement has been initiated.

- EPA Clean Air Act Stationary Source Civil Penalty Policy (1991)
- DNREC Compliance Enforcement Response Guide, September 19, 2002

- 6 Del. C. Section 6005 (Administrative and Civil Penalties)
- 6 Del. C. Section 6013 (Criminal Actions)

- The Timely & Appropriate (T&A) Enforcement Response to High Priority Violations (HPVs), June 23, 1999.

See above for a description of the 20 files reviewed.

Recommendations: (1) DNREC should institute procedures to ensure that all penalty calculations are documented, and maintained in the appropriate enforcement files.

Action: DNREC recently has directed its paralegals and staff to document all penalty calculations in an internal memorandum.

(2) DNREC should make all compliance monitoring and enforcement files readily available in one central location.

Action: State officials agree with this recommendation but only after the enforcement action is resolved. DNREC is moving all resolved compliance monitoring and enforcement files to one central location. DNREC declined to provide an estimate of when the consolidation of files is expected to be complete.

Element 8 - The degree to which penalties in final enforcement actions include economic benefit and gravity in accordance with applicable penalty policies.

Clean Air Act Source Universe Information	**Number of Enforcement Actions**
State formal enforcement actions	17 total, at major and SM sources
Number of enforcement files for review	4 addressed HPVs plus 2 non-HPVs with formal enforcement actions in FY2004

		National Average or Total	DE
Metric a	No activity indicator _ penalties	$44,529,632	$546,195[28] (State-lead HPVs)
Metric b	Penalties Normally Included with Formal Enforcement Actions at HPVs	84.4%	100%[29]

Assessed penalties for the five state-lead HPVs that were addressed in FY2004 totaled $546,195. Penalties assessed, as reported to EPA, ranged in amounts from as low as $11,602 to as high as $300,000. Except for one HPV which is under appeal, the collected amounts reported to EPA at Timely and Appropriate meetings and in AFS equal the assessed amounts.

All five of DNREC's HPV's addressed in FY2004 included penalties, which exceeds the national average of 84.4 percent.

[28] Since the T&A Policy focuses on HPVs, the assessed value for state-lead HPVs addressed in FY2004 only is listed in the above chart. Original metric for 8a was $1,011,045, but this includes non-HPVs, some duplicates, and does not include certain stipulated penalties assessed with addressing actions in FY2004. In addition, penalties were collected in FY2004 for a sixth HPV which was listed in the original metric, but this HPV was addressed in FY2000.

[29] Original metric for 8b was 90.9% for HPVs as well as non-HPVs, but this double counts some penalties assessed for one enforcement action and does not count another action which did include a penalty.

As discussed under Program Element 7, documentation of initial penalty calculations was generally good in seven out of ten files reviewed, where DNREC initiated formal enforcement action. Nonetheless, the initial penalty calculations documented in the files rarely equal the amount reported as "assessed" to EPA. This is to be expected because EPA has defined the "assessed" penalty, to be reported in AFS, as the amount included in the final order or decree. Thus, reductions in penalties from the initial calculations and before the final enforcement action is completed is typically not reported to EPA.

Reviewers are most concerned that documentation of the basis for deriving final penalties (what is generally defined as the "assessed" amount to be reported to EPA) was found in none of the files. Most enforcement files reviewed showed that penalties were reduced extensively from the initial calculated amounts, yet the basis for this reduction was poorly, if at all, documented. This is viewed as an area of vulnerability.

From discussions with staff during the file review, the Review Team was told that reductions in penalties often occur during Enforcement Panel meetings. DNREC management subsequently indicated to the Review Team that the Enforcement Panel rarely recommends a reduction to the penalties proposed. Nonetheless, the minutes of those meetings provided to reviewers did not typically document such reductions in penalty amounts**.** Staff also reported to the Review Team that AQM Engineering and Compliance managers often reduce penalty amounts to be assessed if the original calculations were erroneous or likely to be challenged. DNREC management told the Review Team that penalties may be reduced if the calculated penalty exceeds the state's statutory $10,000 per day maximum fine for administrative penalty actions. The Review Team was unable to ascertain in many cases whether the reductions in penalties were appropriate due to a lack of such documentation.

Citation of information reviewed for this criterion:

- EPA Clean Air Act Stationary Source Civil Penalty Policy (1991)

- DNREC Compliance Enforcement Response Guide, September 19, 2002

- 6 Del. C. Section 6005 (Administrative and Civil Penalties)
- 6 Del. C. Section 6013 (Criminal Actions)

- The Timely & Appropriate (T&A) Enforcement Response to High Priority Violations (HPVs), June 23, 1999.

In addition, EPA reviewed files of four HPVs addressed in FY2004 plus two non-HPVs with formal enforcement actions in FY2004.

Recommendation: (1) To adhere with the *EPA Clean Air Act Civil Penalty Policy*, DNREC should institute processes to ensure that the bases for reductions in initial penalties are documented in all enforcement files.

Action: As discussed in the follow-up discussion in Program Element 7, DNREC has instructed its paralegals to document penalty calculation revisions in an Internal Memorandum.

Element 9 - The degree to which enforcement commitments in the PPA/PPG/categorical grants are met and any products or projects are completed.

Clean Air Act Source Universe Information	Number of Agreements
Performance Partnership Agreements	NA
Performance Partnership Grants	NA
PPA/PPGs	NA
Categorical Grants (SEAs)	1 STAG Grant under CAA §105
Other applicable agreements (e.g. enforcement agreements)	NA
Total number of agreements	1
Number of agreements reviewed	1

Metric a	State agreements (PPA/PPG/SEA, etc.) contain enforcement and compliance commitments that are met.	All compliance monitoring and enforcement commitments were accomplished.

DNREC's FY2004 Section 105 grant lists the following compliance monitoring and enforcement commitments:

- Submit by 7/1/04 a revised FY 2004/2005 Compliance Monitoring Plan
- Provide an analysis of MACT area source non-compliance findings and an evaluation of MACT area source inspections
- Provide the number of Supplemental Environmental Projects (SEPs) used in enforcement actions and penalty amounts mitigated
- Identify the reductions in emissions resulting from selected enforcement actions, to the extent quantifiable
- Participate in quarterly T&A conference calls

- Identify to EPA all sources subject to the T&A Policy

- Within 30 days from identification of each HPV, provide copies of noncompliance determinations for major sources and SM sources identified as HPVs and follow-up enforcement actions, penalty amounts and dates paid

- Report specified data elements into AFS within 30 days of completion

- Resolve actions consistent with the T&A Policy.

EPA's Mid-Year Report indicates that DNREC's success in implementing the Area Source MACT Strategy resulted in dramatic improvements of compliance in the sectors covered by the Strategy. The Report further indicates that DNREC was successful in reporting HPVs in accordance with the time lines set forth in the T&A Policy. In the report, EPA expresses concern that DNREC had not assumed the responsibility of linking HPV actions in AFS so that AFS and ECHO, the public website that shows compliance data, would provide the most up-to-date information on HPVs.

DNREC submitted its revised FY2004/2005 Compliance Monitoring Plan on schedule. DNREC met 97 percent[30] of its FY2004 inspection commitments at major sources. Two sources not inspected were shut down permanently during the year and should have been removed from the Compliance Monitoring Plan. A third inspection was not completed until November, 2004, due to permitting issues. In addition, DNREC completed in FY2004 33 FCEs that were scheduled for FY2005. Please note that the CMP is a two-year plan; FCEs scheduled during the two-year period may be scheduled for year one or year two and flexibility exists to switch sources between years, provided the CMS is updated accordingly.

DNREC committed to inspect 22 area source dry cleaner sources in FY2004. According to DNREC's End-of-Year Report, DNREC actually inspected 70 dry cleaners, well in exceedence of its commitment. DNREC inspected one dry cleaner two times in FY2004. Region 3 would prefer that an FCE be reported only once per year in AFS,.and any follow-up inspections be reported as a PCE. However, Region 3 recognizes that national policy and guidance does not preclude the reporting of multiple FCEs. However, it would be inappropriate to conduct multiple FCEs at facilities at the sacrifice of completing other CMS obligations.

DNREC provided an analysis of its dry cleaner inspections in its End-of-Year Report. That report did not include an analysis of its inspections at MACT Subpart N, O, or T area sources.

As part of DNREC's commitment under the Region 3 Area MACT Source Implementation Strategy, DNREC committed to inspect, between 1999 and 2004, all its area source chrome electroplaters and halogenated solvent cleaners subject to Subparts N and T, respectively, of the MACT. As of October, 2005, DNREC has inspected all of the operating area source chrome electroplaters and its one halogenated solvent cleaner area source.

[30] Metrics 1a and 1b

One DNREC settlement in FY2004 included a SEP, valued at $200,000. This settlement addressed two state-lead HPVs.

No information was provided to EPA in FY2004 on the estimated emissions reduced for addressed HPVs that year.

DNREC participated in four T&A meetings in FY2004. Aside from late reporting of HPVs discussed below, the Review Team has identified no problems related to DNREC's timely reporting in AFS in FY2004. In fact, Region 3 has considered DNREC's air data to be of exceptionally high quality, based on occasional random audits and other data retrievals.

Out of the 11 HPVs identified by DNREC in FY2004 seven were reported to EPA more than 45 days after Day Zero. See discussion under Element 4. Copies of NOVs for these late-identified HPVs also were submitted more than 45 days after Day 0. It appears that EPA had not compared Day 0 to the Date Reported for these HPVs when EPA reported, during the Mid-year Review, that one of DNREC's strengths was its timeliness in reporting. It is likely that EPA's positive comment on this matter mostly was based on DNREC's timeliness in providing copies of NOVs and orders to EPA after the HPV was identified.

In the course of the file review, EPA found that DNREC had failed to report to EPA that violations found at one source had risen to the level of an HPV. When EPA raised this issue to DNREC, DNREC concurred that this source should have been listed as an HPV. Consequently, one HPV with a Day Zero in FY2004 was "reported" at the end of FY2005. DNREC reports they are pursuing enforcement in response to this violation.

58.3 percent of Delaware's state or joint-lead HPVs in FY2004 remained unaddressed for more than 270 days (see discussion under Program Element 5). Such a high percentage of late addressing actions does not conform with the T&A Policy and is viewed as a significant vulnerability.
After FY2005, Region 3 state and local agencies will set forth their annual commitments in the form of an Memorandum of Understanding. The Section 105 grant will not include air enforcement commitments.

Citation of information reviewed for this criterion:

- DNREC's Section 105 grant
- EPA's Section 105 Mid-Year Grant Report for FY2004 (compliance monitoring and enforcement portions only)
- Grant monitoring files maintained by the EPA State Liaison Officer

– Timely and Appropriate meeting minutes.

Recommendations: (1) DNREC should be commended for the notable improvement in compliance at dry cleaner area MACT sources as a result of DNREC's successful implementation of the Region 3 Area Source MACT Strategy in Delaware. In addition, aside from data problems cited above related to timely reporting of HPVs, DNREC should also be commended for its success in entry and maintenance of data elements into AFS.

Action: None needed.

(2) DNREC's late identification and reporting of HPVs is a significant vulnerability. See Recommendations under Program Element 4.

Action: See Program Element 4.

(3) Reviewers consider DNREC's untimeliness in addressing HPVs to be DNREC's most significant vulnerability in the air enforcement program. It is also recognized that the SAG's office plays a major role in timely addressing HPVs. Much of this delay, as it relates to the SAG's office, is outside the control of DNREC. See Recommendations under Program Element 6.

Action: See Recommendation #1 under Program Element 6.

Element 10 - Degree to which the Minimum Data Requirements are timely.

Data Metric

		National Average	**DNREC**
Metric a1	Percent of HPVs that are entered to AFS more than 60 days after the HPV designation - state only	56%	100%
Metric a2	Percent of state-lead HPVs that are reported to EPA more than 45 days after Day 0		7/11 HPVs = 64%

File Review Metric

Metric r	HPVs are identified within 45 days after inspection, review, etc.
	FCEs and PCEs are completed within 60 days of inspection date
	Title V certification results are entered into AFS within 30 days of Title V certification review

	Final stack test results are entered into AFS within approximately six months of conduct of test

Minimum Data Requirements represent the minimum amount of data that EPA believes is necessary to manage the national air stationary source compliance monitoring and enforcement program. FCEs, results of stack tests, results of Title V annual certification reviews, and compliance status are some examples of the 26 Minimum Data Requirements in FY2004. The FY2004 Section 105 grant required that DNREC enter Minimum Data Requirements, in addition to permits issued, continuous emissions monitors (CEMS) excess emissions data, and CEMS relative accuracy testing audits, and combustion gas audits, into AFS within 30 days of completion.

As shown in Metric 10a1, all state-lead HPVs were entered into AFS more than 60 days after the HPV was identified. However, for reasons set forth below, Metric 10a1 is not viewed as an accurate or fair measure of DNREC's reporting of HPVs to EPA. According to Metric 10a2, which is considered to be a more accurate and fair measure, **64 percent** of the HPVs identified by DNREC in FY2004 were reported to EPA more than 45 days after Day 0. Sixty-four percent is still considered a vulnerability.

Metric 10a only shows HPVs that were entered into AFS in FY2004 as new HPVs. DNREC actually identified 11 new HPVs in FY2004 (including one FY2004 HPV was identified in late 2005 as a result of this Program Review). As part of the T&A process, Region 3 has tracked the dates that DNREC actually reported new HPVs to the State Liaison Officer. Such reporting often occurred during T&A meetings but also occurred via fax or e-mail between meetings. Metric 10a2, which is based on minutes from Timely & Appropriate meetings and reflects notice provided to EPA during and between meetings is considered a more accurate and fair measure of DNREC's reporting of HPVs to EPA.

In FY2004, EPA Region 3 was linking the HPVs in AFS for DNREC because DNREC did not have the programming capacity to perform this function. DNREC continued to submit NOVs and Orders for HPVs to EPA on a monthly basis, as required under the FY2004 grant but most questions or concerns related to the documents submitted to EPA were discussed at the subsequent T&A meeting. This often resulted in delayed entry of HPV data to AFS until that discussion. HPVs under this process may have been reported to EPA up to three months after DNREC identified the HPV and an additional time lag would then be likely between the date reported and the date that EPA wrote the T&A minutes and uploaded new HPV information to AFS. This process may account for four HPVs that were reported between 45 and 90 days after Day Zero. Three others were reported to EPA more than 90 days (three months) after Day Zero; EPA linking of HPV data described above cannot be the reason these three were reported so very late.

Seventeen out of 19 files reviewed by the Evaluation Team included CMRs or PCE reports that were completed within 60 days after the actual inspection, based on comparing inspection dates and dates of the reports in the files. See File Review metric 3A.

As of August, 2005, 25 out of 86 stack tests performed in FY2004 are listed with results code "99" which usually means that the results are "pending." AFS Business Rules, dated July, 2005, required that stack tests should not be reported to AFS until the results of the test are known. It is also recognized that DNREC officials have been proponents of introducing the use of a "pending" code that would be acceptable to Agency officials. While this has not yet been officially accepted by EPA, it is under serious consideration. For stack tests being conducted pursuant to 40 CFR Part 60, the test report is to be submitted within 180 days after the initial startup date or within 60 days after reaching maximum production rate. For those tests being conducted pursuant to 40 CFR Part 61, the test report is to be submitted within 31 days after completion of the test. If the test is being conducted pursuant to 40 CFR Part 63, the test report must be submitted within 60 days after the test is completed unless another time frame is specified in the applicable subpart. Thus, assuming that DNREC has reviewed all FY2004 stack test reports, it appears that DNREC has not met the grant requirement to enter stack test results into AFS within 30 days.

In follow-up discussions with DNREC regarding the results of this Program Review, DNREC responded that some of the stack tests listed in the metric are not stack tests to determine compliance. DNREC also responded that many of the stack test results in this metric were still pending in August, 2005. See Program Element 3 for a discussion of DNREC's timeliness in identifying violations.

Citation of information reviewed for this criteria: See above for a description of the 20 files reviewed.

Recommendations:
(1) See Recommendations under Program Element 4 regarding late identification and reporting of HPVs.

Action: See Program Element 4.

(2) DNREC should begin to link its own HPVs in AFS, as this also is expected to improve the timeliness of entry of Minimum Data Requirements.

Action: See Recommendation #4 under Program Element 4.

Federal Recommendation:

(3) EPA Headquarters is to revise federal guidance on stack tests, use of "pending" code, and clarify the timeline required to enter date of test and "pass"/"fail" once results are known.

Action: Revised federal guidance to be issued.

Element 11 - Degree to which the Minimum Data Requirements are accurate.

Clean Air Act Source Universe Information	Number of Sources in Universe
Full Compliance Evaluations - Major and SM sources	111 FCEs[31]
Partial Compliance Evaluations	306
Total Number of Evaluations	417
Number of inspection files for review	20

Data Metric

		National Averages or Totals	DNREC
Metric a	#HPVs/ # sources in violation - operating major sources only - combined	94.3%	73.3%[32]
Metric a1	#HPVs/ # sources in violation - major, SM, operating, and shut-down sources - combined		54.5%[33]
Metric b1	% of stack tests conducted & reviewed without pass/fail results code entered to AFS - state-only	12.2%	32.9%
Metric b2	# of sources with stack test failures - state-only	270 (total)	2 (total)

File Review Metric

Metric c	Accuracy of minimum data requirements	7 out of 20 files reviewed (35%) and compared to AFS showed minor errors in AFS

Most Minimum Data Requirements entered by DNREC in FY2004 appear to be accurate. In addition, many data elements that are not Minimum Data Requirements but are required under the Section 105 grant for Delaware appear to be complete. Examples of these additional elements that appear to be complete include permits issued, FCEs completed at certain area

[31] Metric 12d2

[32] Original metric, 76.9%, was based on ten operating major sources as HPVs, but this does not include one facility, which was recently added to AFS as an FY2004 HPV. Also, the original metric lists 13 major sources in violation, but one facility was incorrectly not listed in AFS as out of compliance during the part of FY2004 where it was an HPV. Thus, the final metric is 11/15 = 73.3%.

[33] Metric 11a plus a synthetic minor source and a shut-down source divided by total of all major and synthetic minor sources in violation (23; See Metric 12E) for FY2004. This is not a national metric but rather a metric that Region III is presenting because HPVs may be synthetic minor sources and Metric 11a does not capture the synthetic minor universe, the HPVs that are shut down, nor those improperly listed in AFS as "in compliance."

MACT sources, a separate stack test entry for each pollutant tested, and identification of MACT Subparts.

However, of the 26 Minimum Data Requirements in AFS, all but one or two did not match data in 7 of the 20 files reviewed and compared against AFS. Most discrepancies that were found through file review were minor discrepancies. The most significant discrepancies are listed below:

- results for many stack tests (see discussion below)
- completion of annual certification reviews (see discussion under Element 10)
- compliance status (see discussion below)
- identification of one HPV (see discussion under Element 9).

54.5 percent of Delaware's major and/or synthetic minor sources that AFS lists in violation in FY2004 were HPVs during some part of that year. This is an indicator that DNREC lists its HPVs as out of compliance, as required in the *Timely & Appropriate Policy.*

However, one HPV is not listed in AFS as out of compliance during FY2004, even though the source was identified as an HPV in August of 2004. The *Timely & Appropriate Policy* states that all HPVs should be listed in AFS as out of compliance until the HPV is resolved. The June 2005 *AFS Business Rules* state this even more explicitly. Even though Region 3 was responsible in FY2004 for linking HPVs, DNREC was responsible for maintaining accurate compliance status for state-lead HPVs. In addition, DNREC issued NOVs to 23 major and synthetic minor sources in FY2004, according to AFS (See Metric 12f). Nonetheless, eight of those major and synthetic minor sources are not listed in AFS as "out of compliance" in FY2004. AFS is designed to show most instances of noncompliance that exceed thirty (30) days. Since compliance status is one of the Minimum Data Requirements, this inaccuracy in compliance status would be viewed as a significant vulnerability if these sources remained unresolved for more than 30 days.

It appears that DNREC enters all stack tests into AFS and the dates of those tests are accurate. However, **32.9 percent** of stack tests performed in FY2004 are listed in AFS without pass/fail results. As discussed under Program Element 3, most of these are listed with "pending" results which does not comply with the AFS Business Rules. As noted above, EPA is aware that DNREC officials believe that a "pending" code should be allowed. While this has not yet been officially accepted by EPA, it is nonetheless under serious consideration. Stack tests that fail to demonstrate compliance with an emission limit required under 40 CFR Parts 60, 61 or 63, the original stack test is considered a failed stack test until the facility is re-tested and passes within the required time frame. See Clean Air Act National Stack Testing Guidance dated September 30, 2005.

State Program reviewers compared penalties assessed for HPVs addressed in FY2004, as reported in AFS, to those amounts internally tracked through Timely and Appropriate meetings. AFS listed the correct penalties assessed for all five state-lead HPVs.

According to AFS, DNREC reviewed only **83.1 percent** of the FY2003 Title V annual certifications received. This exceeds the national average of 73.5%. DNREC officials have verbally reported, however, that all FY2003 Title V annual certifications were probably reviewed. According to DNREC, it is very possible that the remaining Title V certification reviews were not input to AFS because the inspector(s) who performed the reviews did not report this to the DNREC employee who was responsible to enter this data into AFS.

Citation of information reviewed for this criterion:

- The Timely & Appropriate (T&A) Enforcement Response to High Priority Violations (HPVs), June 23, 1999
- Final Clean Air Act National Stack Testing Guidance dated September, 2005
- AFS Business Rules Compendium dated July, 2005.

In addition, EPA reviewed the following files that indicated violations:

- 4 HPV files
- 4 major source files, including one delisted HPV - non-HPV
- 3 SM source files - non-HPV.

For the metric data, EPA reviewed the following in AFS for FY2004:

- total HPVs,
- compliance data for all sources
- NOVs issued.

Recommendations:

(1) Compliance status is a minimum data requirement. DNREC should investigate why the one HPV and eight sources that received NOVs in FY2004 were not listed as out of compliance during that period.

Action: DNREC has agreed to contact EPA in the future to request corrections to historical compliance as appropriate.

(2) All stack tests should be listed with either pass or fail results unless use of a "pending" code is accepted by Agency officials. Again, while this has not yet been officially accepted by EPA, it is under serious consideration.

Action: See Program Element 3. Revised federal guidance is pending.

(3) See Recommendations under Program Element 10 to improve DNREC's reporting of Title V certification reviews.

Action: See Program Element 2.

Element 12 - Degree to which the Minimum Data Requirements are complete, unless otherwise negotiated by the Region and State or prescribed by a national initiative.

Data Metrics

Metric a1	AFS operating major sources	65[34]
Metric a2	AFS operating major sources w/ air program code = V	65[35]
Metric b1	Major sources per *OTIS*	65[36]
Metric b2	Synthetic minor sources per *OTIS*	79[37]
Metric b3	NESHAP minor sources per *OTIS*	1[38]
Metric c1	Subprogram universe is accurate in AFS (NSPS, NESHAP, and MACT)	Informational only prior to FY06; however, RIII requires MACT Subprogram to be entered
Metric d1	Sources with FCEs in FY2004 (major and SM operating sources, state-only)	108[39]
Metric d2	Total FCEs completed in FY2004 (major and SM operating sources, state-only)	111[40]

[34]Original metric was 68, but DNREC claims that 3 sources should not be included.

[35]Original metric was 67, but DNREC claims that 2 sources should not be included.

[36] Original metric was 68. See footnote to Metric 12a1.

[37]Original metric lists 76 synthetic minor sources. However, 3 sources should be added.

[38]DNREC reports that this matches DNREC's database but that 1 source is probably closed.

[39]DNREC's records of FCEs completed at major amd SM operating sources in FY04 list 109, which is very close to the 108 listed above.

[40]DNREC performed two FCEs at three major or SM sources that year, causing the difference between the 12d2 and 12d1 values.

Metric d3	Number of PCEs reported to AFS in reporting period	306 - Informational only[41]
Metric e	# of sources that had violations at any point during FY2004 - combined	34[42], of which 23 are major or synthetic minor sources
Metric f1	# of NOVs issued in FY2004 - state only	49[43]
Metric f2	# of sources with NOVs in FY2004 - state-only	30, of which 23 are major or synthetic minor sources
Metric g1	# of new HPVs (pathways) in FY2004 - state-only	15[44] HPVs
Metric g2	# of sources in HPV in FY2004 - state-only	9[45]
Metric h1	# of State formal actions issued in FY2004, major and synthetic minor sources	17[46]
Metric h2	# of sources with state formal actions in FY2004, major and synthetic minor sources	11[47]
Metric i	Total dollar amount of state-assessed penalties in FY2004 - state-lead HPVs	$546,195[48] for five state-lead HPVs addressed in FY04.
Metric j	# of major sources missing CMS Policy applicability	0 major sources w/o CMSC field

All Minimum Data Requirements entered by DNREC appear to be complete, except for the following:

[41]DNREC reports completion of 339 PCEs at major, synthetic minor, minor and non-AFS facilities. DNREC indicates figure 12d2 appears approximately correct.

[42]Original metric was 36, but this included 3 sources which were incorrectly entered in AFS (EPA compliance) as out of compliance since 1994/1995. Also, the original metric did not include one source which is improperly listed as "in compliance" in FY2004.

[43]DNREC agrees with this value.

[44]Original metric was 13 HPVs, but this value did not include 2 sources which are FY2004 HPVs that were only recently identified.

[45]Original metric was 8 HPVs, but this value did not include one source.

[46]Original metric lists 19 formal actions, but two of these are at minor sources.

[47]Original metric lists 12 sources, but one of these was at a minor source.

[48]Original metric lists $1,011,045, but this includes penalties associated with 10 violations that were not HPVs, with five violations that were HPVS in FY2004, and for one HPV that was addressed in 2000 but paid in FY2004. Furthermore, the $1,011,045 value includes several duplicate counts and does not include certain stipulated penalties that DNREC assessed in FY2004. The number presented in the above table refers only to HPVs, since that is the focus of the T&A Policy.

- results for all stack tests (see discussion under Program Element 11)
- completion of annual certification reviews (see discussion under Program Element 10)
- compliance status (see discussion under Program Element 11)
- identification of one HPV (see discussion under Program Element 9).

In addition, many data elements that are not Minimum Data Requirements but are required under the Section 105 grant for Delaware appear to be complete. Examples of these additional elements include permits issued, FCEs completed at certain area MACT sources, and identification of MACT Subparts.

DNREC assessed penalties for all state-lead HPVs addressed in FY2004. As of October, 2005, assessed penalties for four of those HPVs have been paid in full. The fifth penalty is under appeal.

Citation of information reviewed for this criterion:

- CAA Stationary Source Compliance Monitoring Strategy, April 25, 2001
- DNREC's Section 105 grant files
- EPA's Section 105 Mid-Year Grant Report for FY2004 (compliance monitoring and enforcement portions only).

Recommendations:

(1) See Recommendations under Program Element 11 regarding stack test results.

Action: See Program Element 11.

(2) See Recommendation #3 under Program Element 11 regarding entry of Title V annual certification reviews.

Action: See Program Element 11.

(3) See Recommendation #1 under Program Element 11 regarding entry of compliance status where violations were found that were not resolved within 30 days.

Action: See Program Element 11.

(4) See Recommendation #2 under Program Element 6 to ensure that DNREC identifies all its HPVs in a timely manner.

Action: See Program Element 6.

State Program Review Framework for
Delaware Department of Natural Resources and Environmental Control
EXECUTIVE SUMMARY

Introduction

The EPA Office of Enforcement and Compliance Assurance (OECA), all ten EPA Regions, the Environmental Council of States (ECOS) Compliance Committee and state representatives have jointly developed a method to assess state performance in the enforcement and compliance assurance program. The purpose of the assessment is to provide a consistent mechanism for EPA Regions, together with their states, to ensure agreed upon minimum performance levels and provide a consistent level of environmental and public health protection across our Nation.

In short, the assessment consists of 13 questions comparing actual compliance and enforcement practices with U.S. EPA policies and guidance. The 13 evaluation areas posed by this framework are consistent with evaluation areas delineated in the1986 guidance memorandum signed by Jim Barnes entitled *"Revised Policy Framework for State/EPA Enforcement Agreements."* Additionally the framework utilizes existing program guidance, such as our EPA national enforcement response policies, compliance monitoring policies, and civil penalty policies or similar state policies (where in use and consistent with national policy) to evaluate state performance and to help guide our definitions of a minimum level of performance.

Overall Picture

Region III's evaluation of the Delaware Department of Natural Resources and Environmental Control's (DNREC) Air, RCRA and Water enforcement programs was conducted by staff from the Region's Air, RCRA and Water enforcement programs using the framework described above. The review period for DNREC was fiscal year 2004.

Each program worked with their counterparts at DNREC to determine the number of files to be reviewed. The number of files to be reviewed was determined based on the number of facilities in the state and enforcement activity in each program. The Air program reviewed 20 files, RCRA program reviewed 37 files, and the Water program reviewed 30 files.

Clean Water Act-National Pollutant Discharge Elimination System (NPDES) Enforcement Program

In August 2005, reviewers from the Office of Compliance and Enforcement (OCE) of the Water Protection Division (WPD) of the U.S. Environmental Protection Agency, Region 3 (EPA) conducted an evaluation of Delaware's compliance monitoring and enforcement activities for the National Pollutant Discharge Elimination System (NPDES) program using the 12 elements set forth in the State Review Framework guidance. The evaluation included a series of interviews, measurable data from the Permit Compliance System (PCS) database (referred to as data metrics), and file reviews. EPA reviewers conducted interviews with the Division of Water Resources (DWR) of the Delaware Department of Natural Resources and Environmental Control (DNREC) and the Delaware Department of Agriculture on August 2nd, and DNREC's Division of Soil and Water Conservation (DSWC) on August 9th. File reviews were conducted at the DNREC Dover office on August 18th and 19th for files under the purview of DWR and DDA, and on August 30th for the files under the purview of DSWC which included files maintained by the Sussex County Conservation District, the Town of Middleton, and the Delaware Department of Transportation (DelDOT).

History

On April 1, 1974, EPA delegated the NPDES program to DNREC, on May 4, 1983 and October 23, 1992, EPA approved revisions to this delegation and then entered into the Memorandum of Agreement between the Department of Natural Resources and Environmental Control for the State of Delaware and the Regional Administrator, Region III United States Environmental Protection Agency (the "Delegation Agreement"), (see Attachment A). The Delegation Agreement did not specify any particular division of DNREC for the responsibility for the implementation of the NPDES program; however, the program has been traditionally housed with DWR. Due to changes to the Federal regulations, certain functions of implementing the NPDES program have been extended to include DSWC and DDA. DWR has primary responsibility for municipal and industrial "point source" discharges of process wastewater and stormwater, except stormwater related to construction sites. Concentrated animal feeding operations (CAFOs) are regulated jointly by DNREC's DWR and DDA which was memorialized in the Memorandum of Agreement between Department of Natural Resources and Environmental Control and Delaware Department of Agricultural (the CAFO Agreement) on June 23, 2000 (see Attachment B). While DNREC maintains delegation for enforcement of NPDES permits issued to CAFOs, DDA has primary enforcement authority of the Delaware's

integral part of the NPDES permits issued for construction activity.

Any construction activity occurring in the State that requires a detailed Sediment and Stormwater Plan also requires Federal NPDES general permit coverage. Submittal of a Notice of Intent (NOI) for Stormwater Discharges Associated With Construction Activity together with approval of the detailed Sediment and Stormwater Plan provides sites with permit coverage to be authorized to discharge stormwater associated with construction activity.

Files related to NPDES permittees are maintained in various locations. There is no central location due to the separation of the NPDES program functions among DWR, DDA, and DSWC and the delegated authorities for the SSWM program. The DWR files are maintained at the DNREC Dover office. EPA reviewers did find certain information was lacking in the files and will be discussed later in this report. In those instances, reviewers inquired to locate the additional information where feasible. In most cases, the inspectors who conducted the last compliance evaluation either provided additional information, or explanation. The reviewers elected not to contact the delegated authorities for additional information.

File Selection

The review team used the following criteria for file selection: The review was for Fiscsal Year 2004, facilities or activities where an inspection or enforcement action had occurred within FY 2004 were considered in the universe of eligible files, and the selections were random. The reviewers were to select between 25 and 40 files. Delaware had over 2000 eligible files. The reviewers were to aim for a 50:50 ratio of files selected based on an inspection being performed and those selected based on an enforcement action being initiated. Since Delaware had taken very few enforcement actions, the reviewers were unable to meet the 50:50 ratio criteria. The NPDES program has a diverse regulated community, and there are multiple agencies who are implementing the NPDES program in Delaware. Thirty-two (32) files were selected to be reviewed, but only thirty (30) were actually reviewed. The reviewers did not extend the file review to industrial users under the Pretreatment Program, unpermitted facilities and activities, or facilities and activities that were in the permitting process in FY 2004, since they do/did not hold an NPDES permit. The files were reviewed on August 18th and 19th. DDA did not need to provide additional information. There was only one file that met the selection criteria; and, therefore the selection list was finalized on August 2nd. The file was reviewed on August 18th. DSWC provided a list of permittees on the same day as the interview, and the files were randomly selected at that time on August 9th. The files were reviewed on August 30th.

The Region requested a revised data metrics which was not been provided. For the data metrics pulled based on the inspection year, OCE pulled data independently for the metrics for FY 2004. There were no notable differences in data.

The EPA reviewers utilized several sources of information to supplement the water enforcement program review, including the NPDES Program Integrity Profile for Delaware (the "2004 Profile") as finalized in August 2004 (see Attachment C), selected DSWC's internal reviews of delegated authorities administering portions of the State's SSWM program, and tabulated universe and inspection data provided by the State. The 2004 Profile characterized key components of Delaware's NPDES program, including program administration and implementation, environmental outcomes, and compliance monitoring and enforcement response, as a result of the NPDES Program Integrity Management System established under the Permitting for Environmental Results (PER) Strategy. Delaware also provided the Region with the SSWM delegation reviews for the Town of Middletown, Sussex County Conservation District, and DelDOT which corresponded with the delegated authorities selected from which to have random inspection files reviewed. Delaware does not utilize PCS as a central repository for the universe or compliance monitoring and enforcement activity data. Therefore, Delaware provided computer generated spreadsheets for facilities inspected during the review period for industrial stormwater facilities and active construction sites, as well as tips and complaints about pollution discharges received/responded to by the Environmental Officers (EOs). Additional sources of information utilized include:

- Memorandum of Agreement Between the Department of Natural Resources and Environmental Control for the State of Delaware and the Regional Administrator, Region III United States Environmental Protection Agency (the "Delegation Agreement"), May 4, 1983;
- Memorandum of Agreement Between Department of Natural Resources and Environmental Control and Delaware Department of Agricultural (the "CAFO Agreement"), June 23, 2000;
- DNREC Compliance Enforcement Response Guide, September 19, 2002 [http://www.dnrec.state.de.us/dnrec2000/Admin/Enforcement/Guide/CandEGuide.htm];
- The Enforcement Management System-National Pollutant Discharge Elimination System (Clean Water Act), February 27, 1986, revised 1989, [http://www.epa.gov/compliance/resources/policies/civil/cwa/emscwa-jensen-rpt.pdf];
- Department of Natural Resources And Environmental Control work product, Section 106 Grant annual program plan for FY 2004;
- Department of Natural Resources And Environmental Control work product, Annual

- Code of Federal Regulations, 40 CRF §§ 123.26 and 123.27;
- Department of Natural Resources And Environmental Control, Strategic Plan Fiscal Years 2003 - 2005, October 31, 2001 [http://www.dnrec.state.de.us/dnrec2000/Admin/StrategicPlan.pdf];
- DNREC, Enforcement and Compliance Annual Report Covering State Fiscal Year 2004 (7/1/03-6/30/04) [http://www.dnrec.state.de.us/DNREC2000/Admin/Enforcement/SecondEnforcementReport.pdf]; and
- U.S. Environmental Protection Agency, Region 3 work product, Delaware NPDES Program Integrity Profile, August 2004.
- National Wet-Weather Strategies [http://www.epa.gov/Compliance/data/planning/priorities/cwa.html]

1. Degree to which state program has completed the universe of planned inspections (addressing core requirements and federal, state, and regional priorities).

Universe Data

Clean Water Act Source Universe	**Number of Sources in Universe in FY 2004**
Majors	21
Municipal	8
CSO	1
SSO	Unknown
Industrial	13
Non-Majors with DMRs	33
Municipals	7
CSO	0
SSO	Unknown
Industrial	26
Other Non-Majors	1708

Construction Sites	1433[1]
CAFOs	2
Permitted	1
Unpermittted	1
Total	1,762 permitted sources

Data Metrics

	Description	**National Average**	**Delaware Average**
Metric 1a	Inspection Coverage - Majors	64.2%	90.5%[2]
Metric 1b	Inspection Coverage - Non-Majors with DMRs	22.9%	33%[3]
Metric 1c	Inspection Coverage Other non-majors	4.6%	**5.9%**
Metric 1r	Trade-off Option	N/A	N/A

File Review Metric - Findings

The Clean Water Act (CWA) data metrics provided by EPA-Headquarters makes a distinction between major permittees, non-major permittees that submit Discharge Monitoring Reports (DMRs), and other non-majors. Element 1 of the SFR protocols is evaluating the degree to which the state program has completed the universe of planned inspections, addressing core requirements and federal, state, and regional priorities. The core program includes the majors and non-majors under standard permits (or those that require the submission of DMRs). The EPA reviewers focused on the federal priority of wet-weather discharges including combined sewer overflows (CSOs) and separate sewer overflows (SSOs) from municipalities, process wastewaters and contaminated stormwater discharges from CAFOs, stormwater discharges related to industrial activities (industrial stormwater), stormwater discharges related to construction activity (construction stormwater), and stormwater from municipal separate storm sewer systems (MS4s). The sources of these wet-weather-related discharges do not submit

includes all these types of sources, however, an inspection or enforcement action focusing on CSOs, SSOs, and MS4s did not occur during the review time frame. EPA and DNREC share most priority areas but not all. DNREC has state-wide priorities identified in its strategic plan.

An annual inspection plan[4] should be used as the baseline for evaluating the performance of the State under this element. Typically, a state water program submits the annual inspection plan to EPA for review with the State Section 106 program plan. An annual inspection plan should reflect state, regional and national priorities. The current national priorities focus on wet-weather discharges. There is no agreement in place between DNREC and EPA on what roles EPA and DNREC will have in achieving the national goals set forth in the national wet weather strategies, or the inspection standards for these facilities/sites that will be done by or on behalf of DNREC. DNREC does not utilize the 106 process and has not submitted its annual inspection plan to EPA for many years.

The requirement of an annual inspection plan comes out of the Delegation Agreement. It states, "The State and Regional Administrator will develop a list of permittees to be the subject of State compliance inspections pursuant to a neutral inspection plan consistent with the annual State Section 106 Program Plan. The list may be modified with concurrence of both parties. EPA or the State may determine that additional compliance inspections are necessary to assess permit compliance." The types of inspections that would be conducted under the inspection plan included compliance evaluation inspections (CEIs), performance audit inspections (PAIs), compliance sampling inspections (CSIs), and compliance biomonitoring inspections (CBIs)[5]. The definitions of these inspections are in the Delegation Agreement in Attachment A. The Delegation Agreement cited certain inspection manuals that have been compiled and updated through the years. An annual inspection plan is the appropriate vehicle to identify any updated standards. This is an important factor that seems to have impacted several aspects of the review.

In absence of a submitted annual inspection plan, the review team sought any documents that might give insight on any planned inspection activities during the review period. DNREC's Strategic Plan for Fiscal Years 2003-2005 was posted on their website. From reviewing the Strategic Plan, the review team found no measurable goals for the NPDES program. The NPDES-related areas focused on in the Strategic Plan were for improving stormwater management and providing assistance to the Nutrient Management Commission. The only compliance monitoring or enforcement activity was to conduct stormwater inspections under the purview of DNREC (federal and state funded, non-DelDOT projects). There was no information about what program improvement Delaware was trying to accomplish through inspections. DSWC stated that sites are not inspected until construction begins and a BMP sediment

The SFR protocols anticipated that an annual inspection plan would be available when the state proposes to inspect less than 100% of its majors and 20% of its minors. When an annual inspection plan is not available, this section was to be evaluated based upon the completion of inspections performed at majors and non-majors as reported in PCS or manually. Currently, DNREC does not provide any manual reporting on inspection coverage by the state, except for under the Annual Noncompliance Report for non-majors (ANCR). The requirements for the ANCR do not require specific information on the type of monitoring activity performed (i.e. off-site reviews of self reported documents vs. on-site inspections). As is the case with all Region 3 states, ANCRs submitted by the states have not included wet-weather non-majors. Certain states have begun to change their data management procedures to include all non-majors.

The EPA reviewers referenced any source of information that could be provided by the State to characterize their level of inspection coverage at majors, non-majors (with DMRs), and other non-majors as related to the categories of wet-weather dischargers. Overall, the reviewers found that DNREC did not perform any inspections (CEI, PAI, CSI, or CBI) that fully meet the standards of the 1994 NPDES Compliance Inspection Manual at majors or minors. For majors, DNREC reported an inspection at 95.2%, but the review team finds that this number should by 90.5%. The difference between these two numbers represents one facility. DWR stated that one facility has shut down its oepration and no inspection was required. For minors, DNREC and EPA agreed not to acquire all inspection data at non-majors, due to the burdensome nature since no central database tracks this data. DNREC provided enough information for EPA to determine that less than 20% of non-majors were inspected by DNREC.

In light of more recent guidance, the reported and adjusted inspection coverage for majors is greater than the minimum baseline of 70% when a state uses the allowed trade-off alternative[6] and the national average. Due to the trade-off alternative for annual inspection plans, the national average of 64.2% is skewd. Since Delaware did not submit an annual inspection plan, the performance standard for inspection coverage at majors remains at 100%. If future situations prevent DWR from inspecting 100% of the majors, it can be negotiated as part of the annual inspection plan (which can be modified upon consent). This inspection rate for non-majors is mainly due to the inspection level of DNREC staff at permitted facilities/activities that do not submit DMRs, specifically the inspection level of DSWC at construction sites. The national average is 4.6% for this category/

Recommendation (1): Delaware should formalize a process for setting goals for their NPDES program using an annual inspection plan. The inspection plan should include inspection priorities that include core enforcement requirements, which reflect state, regional, and national

these activities for which EPA is not funding.

Recommendation (2): The number of inspections and the level of detail of the inspection performed by DNREC staff needs to be formalized annually to meet the requirements of the Delegation Agreement at the same time as the 106 grant workplan. EPA is flexible as to whether the plan is negotiated as apart of the 106 grant or as a separate docuement. The inspection plan should:

- Reflect the compliance monitoring activities for the NPDES regulated community.
- Specify the timeframe and the work to be performed by DWR, DSWC and EPA,
- Identify the facilities selected randomly to be inspected by DNREC based on a neutral targeting scheme (e.g. based priority watersheds, environmental indicators, sectors, historical compliance rates, etc.)
- Identify any special investigations,
- Consider state, national, and regional priorities in developing criteria,
-Consider available resources to ensure the schedule can be reasonablely accomplished,
-Identify the level of inspection to be conducted conforming to the most recent inspection guidance,
-Discuss alternative approaches to ensure minimal inspection coverage if resources prevent DNREC from inspecting 100% of majors and 20% of non-majors.
- If alternative approaches include third parties, EPA would need agreement on the level of detail required by the third party to count toward the inspection level, the procedures in place to ensure the performance of the third party, and procedures in place to make compliance determinations of the facilities either by DNREC or by the third party pursuant to guidance from DNREC.

Inspection data performed in accordance with the inspection plan must be entered into PCS, or manually where agreed upon.

Inspections at Major Sources: Federal regulations require States to have procedures and ability to inspect the facilities of all major dischargers at least annually under CFR 40 §123.26(e)(5). DWR has all responsibilities associated with the regulation of majors. The universe of majors includes 21 facilities. Since an inspection plan was not submitted to EPA, EPA reviewed the compliance monitoring activity reported in PCS. DNREC reported 20 CSI inspections (covering 20 facilities) and 311 reconnaissance (recon) inspections (covering 21 facilities). DNREC did not conduct an inspection (CEI, CSI, CBI, or PAI) at 100% of the majors, as required. According to the CWA State Review Framework Metrics (data pulled 7/1/03 to 6/30/04), the inspection frequency for majors is 95.2% (20 out of 21). The percentage

These observations provide the basis for the review team conclusion to only give credit for 19 inspections, and how those inspections should be counted as CEIs, and not as CSIs as reported. These observations and recommendations are discussed below by inspection type.

Reconnaissance Inspections

In the 7 program files reviewed, the review team found no inspection reports for "recon" inspections that had been reported in PCS. When we asked about this, one DWR representative said that they only write inspection reports for CSIs and another said they only write inspection reports if a violation was detected. We asked about the numerous visits pointing out that the inspection data showed that DWR conducted these recon inspections approximately once a month (ranging from about 9 to 43 inspections at particular facilities). According to DWR, the frequency may vary depending on DWR's concerns about the facilities compliance level. For one of the reviewed facilities, DWR reported over 40 site visits. There was no documentation of any kind in the file for these recon inspections. The inspector's logbook was shown to the review team. We found the notes consisted of only a few words and abbreviations.

An inspection report is a key element of any inspection. DWR neglected to document the observations made by the inspectors during recon inspections in an inspection report even when the visit was prompted by concerns of noncompliance. DWR did not meet the inspection requirements for a recon inspection because their inspectors failed to document their observations regarding compliance/noncompliance in an inspection report. The review team considers all reported 311 inspections should not be counted as inspections in the data metrics (see Element 12) unless inspection reports are provided to EPA.

Recommendation (4): DNREC should develop SOPs for conducting recon inspections which must include the level of documentation required to be consistent with the most recent EPA guidance.

Compliance Sampling Inspections

During the file review, the review team noted missing documentation in all the CSI inspection reports reviewed. The inspector had not recorded the date and time that the composite sampler was set up by state staff on the chain of custody in any of the reviewed inspection reports. This is needed to demonstrate that, for example, a 24-hour composite sample was indeed a 24-hour composite sample. On December 2nd, in a subsequent meeting with DWR, EPA inquired about documentation for setting up the composite sampler during CSIs. EPA was told that DWR had

evidence admissible in an enforcement proceeding or in court." The review team has determined that the lack of information on the chain of custody jeopardizes the credibility of the test results and therefore none of these sampling inspections should be counted as CSIs, but they may be considered as CEIs.

The EPA review team found that the State did not perform a chemical analysis for all pollutants regulated by the issued NPDES permit during the CSIs at 2 of the 7 majors selected for file reviews. For example, the inspection report and supporting sample results documentation did not have results for, but not limited to, pH, total residual chlorine, sulfide, phenolic compounds, chromium, and hexavalent chromium.

In looking at inspection reports from previous years, EPA noted a trend in the scheduling of CSIs at a given facility. The dates of the CSIs were generally on or around the same date each year. If facilities are providing the samples and they know approximately when DNREC will perform the sampling, EPA has little confidence that the inspections are "unannounced" which undermines the representative-nature of the samples. DWR confirmed our conclusion about the trend in scheduling, and agreed that the timing should more random. DNREC explained that CSIs are announced due to the planning and logistics required to conduct a CSI.

The inspection report for the CSI performed at the only major with CSOs did not include documentation of a visual inspection of all outfalls or documentation demonstrating other CSO related permit requirements were evaluated. The checklist used for the inspection reports makes no mention of CSO-related questions. DWR confirmed that the CSO outfalls were not inspected because they were inspected in 2003. On December 2nd, EPA requested the inspection report for the CSO evaluated for consideration. This inspection report was not provided. This reported CSI did not meet the CEI requirements; and therefore, should not be counted in the inspection coverage. In the future, if the State believes there are circumstances warranting a less comprehensive inspection at a major, this should be negotiated in the annual inspection plan.

Recommendation (5): DWR should develop SOPs and training for conducting CSIs, including the collection of samples, pursuant to the September 1994 NPDES Compliance Inspection Manual and all applicable regulations. DWR is required to perform chemical analysis on all parameters with effluent limits and any parameter that is suspected to be in the effluent at levels that may impact water quality standards. When developing an inspection schedule, DNREC should ensure sampling events are more random from year to year and that staff has adequate equipment and time to conduct and document the CSIs.

The universe of traditional minors includes 32 facilities. DWR has all responsibilities for regulating traditional minors. Since an inspection plan was not submitted to EPA, EPA reviewed the compliance monitoring activity reported in PCS. DNREC reported 11 CSI inspections (covering 11 facilities) and 214 reconnaissance inspections (covering 21 facilities). A review of the inspection data during the review period showed Delaware reported one CSI at 33% of the traditional minors. According to the CWA State Review Framework Metrics, the inspection coverage for traditional minors appears to be 61.8%. The discrepancy is a result of the data metric capturing non-majors that do not submit DMRs, including a CAFO, an MS4, and an individual permit for stormwater discharges associated with industrial activity. It also counted facilities only receiving an recon inspection in the inspection coverage.

Similar observations regarding the completeness of inspections made of the majors are applicable for the traditional minors. Primarily, the lack of inspection reports for recon inspections, and samples being provided by the permittees for the CSIs.

Note: Recommendations from previous section still applicable. No further recommendations are necessary.

Inspection coverage of other sources (that do not submit DMRs, such as wet-weather dischargers): The compliance monitoring responsibilities for wet-weather discharges are shared among DWR, DSWC, and DDA. Ultimately, DWR is responsible for any discharge, except from construction sites or permanent stormwater management systems, to a surface water body which includes discharges from collections systems, industrial facilities stormwater, MS4s, CAFOs, and unauthorized discharges. While DNREC maintains delegation for permitting and enforcement of NPDES permits issued to CAFOs, certain day to day activities, such as inspections and informal compliance responses, are performed by DDA, the State agency responsible for implementing Delaware's Nutrient Management Act (NMA) which is a key component of the only NPDES permit issued to a CAFO. As the need arises, DWR has participated in inspections at CAFOs. DSWC is responsible for compliance monitoring of state construction projects. Certain day to day activities, such as construction reviews, maintenance inspections, and informal compliance responses, have been delegated to state and local agencies who have shared authority for Delaware's SSWM program which is a key component of the NPDES permits issued to construction sites. The delegated authorities conduct inspections on a regular basis and at times use the CCR reports as a tool to help target their inspections. DSWC conducts oversight inspections and performs tri-annual reviews of the delegated authorities.

For facilities under this category, Federal regulations require "periodic" inspections as cited in

Without an agreement on what constitutes an inspection at these wet-weather sources, the review team had to make a judgment on how to determine the inspection coverage. Without conducting oversight inspections to determine the level of detail of each inspection (which were not included in the protocols for this review), the only information that the review team has on whether the inspections met the program requirements are the inspection reports themselves. Delaware has developed checklists or a brief narrative form for the state nutrient management, SSWM programs, and inspections at industrial stormwater facilities. However, the review team determined the checklists and brief narratives did not have adequate documentation to demonstrate that all permit requirements were evaluated. The review team found the quality of the inspection reports for these facilities not to meet the standards of the 1994 NPDES Compliance Inspection Manual, and thus is better evaluated under Element 2. The review team is including all site visits conducted by DNREC staff towards the inspection coverage under this category.

The site visits conducted by DDA and the delegated authorities were completed without a mutual agreement with EPA on what would constitute an inspection by these agencies, and the level of oversight by DNREC necessary to ensure the requirements of 40 CFR 123.26 are achieved on behalf of DNREC. DNREC has not demonstrated that it has procedures in place to review the work products of these agencies to determine the compliance status of the facilities/sites therefore, the review team is counting these inspections as part of the inspection coverage. However, the review team acknowledges the efforts of DSWC for performing many oversight responsibilities such as, training on construction reviews, performs oversight construction reviews with the delegated authorities, and conducts tri-annual program reviews. The existing structure of the SSWM program can be improved upon to meet the requirements of the NPDES program.

Overall, DNREC does not meet the minimum 20% inspection level of non-majors without DMRs. Below is a discussion of the inspection or site visit coverage rates by sub-categories currently being performed by DNREC or on behalf of DNREC.

Note: Recommendation for an annual inspection plan is still applicable. No further recommendation is necessary.

Combined Sewer Overflows

The only CSO community is a major, and was considered in the section for majors.

123.26(b)(1), it states, "[The State shall maintain] A program which is capable of making comprehensive surveys of all facilities and activities subject to the State Director's authority to identify persons subject to regulation who have failed to comply with permit application or other program requirements. Any compilation, index or inventory of such facilities and activities shall be made available to the Regional Administrator upon request." In addition 40 CFR 123.26(b)(3) states, "[The State shall maintain] A program for investigating information obtained regarding violations of applicable program and permit requirements." The review team concludes that DWR should take the lead. Currently, the State's compliance evaluation program does not meet the regulatory requirements for having procedures in place to perform "periodic" inspections at permitted facilities to determine compliance with the prohibition of SSOs, inspect or otherwise survey the collection systems of municipalities not holding NPDES permits to determine who may have unpermitted SSOs.

Recommendation (6): DWR should develop SOPs for conducting inspections and/or surveys to ensure the municipalities comply with the permitting requirements for any unpermitted discharges, such as an SSO. Inspections should be entered into PCS (unpermitted facilities can be entered into PCS). Entering the inspection and findings in PCS will help to establish the inventory of municipalities with SSOs. To assure a comprehensive survey, DWR should develop SOPs for coordinating and updating the inventory in PCS of any known unauthorized discharges, including self or citizen reported SSOs, reported to the EOs spill response line. This information is needed to help develop the annual inspection plan.

Concentrated Animal Feeding Operations

There was only one permitted CAFO during the review period. DDA conducted several site visits. At least on one of those occasions, DWR staff was present. In this particular instance, DWR did not write an inspection report because via the MOA, that responsibility is assigned to DDA. DDA did have inspection reports for this CAFO but not a joint inspection report with DWR for the one joint inspection.

The universe of planned inspections goes beyond the one permitted facility. In 1998, EPA requested that all states submit a state-specific CAFO Compliance and Enforcement Strategy which would strategically target all potential CAFOs for CAFO determination inspections by 2003, permitted or unpermitted. EPA made repeated requests to DWR, but to this strategy has not been submitted. Site visits at potential CAFOs continue to be performed by DDA who discovered discharges at a horse track and training facility in 2004. Under 40 CFR 123.26(b)(1), it states, "[The State shall maintain] A program which is capable of making comprehensive

September 2005 and requires coverage of Large Animal Feeding Operations by January 2006.

Delaware's Nutrient Management Commission and Secretary of Agriculture have the lead in addressing NPDES permit regulations and their impact on Delaware. In February, 2005, a Federal Appeals Court ruled that the Federal regulations must change in order to comply with the Clean Water Act. This ruling postponed Delaware's regulations for large farms called Concentrated Animal Feeding Operations (CAFOs).

A current agreement between EPA, DNREC and the Delaware Department of Agriculture (DDA) and the Delaware Nutrient Management Commission (Commission) has authorized the Nutrient Management Program to implement regulations for CAFOs. The Secretary of Agriculture, under the authority of DNREC, will approve these regulations.

It is the Commission's position that a NPDES permit administered by the Nutrient Management Program will only be required if the farm demonstrates a discharge into public waters under weather condition less severe than a 25 year rain event, or approximately 6.3 inches of rain within a 24 hour period. As required by the State a nutrient management plan, records of implement, annual report and certification are required. The Commission, DNREC and DDA are jointly working with EPA to finalize the Delaware CAFO Program.

The DDA has a strategic plan and have shared the plan's following objectives and performance measures that pertain to the DE CAFO program as follows:

> OBJECTIVE: **Concentrated Animal Feeding Operations (CAFO) -** Develop and implement a State National Pollution Discharge Elimination System (NPDES) Permitting Program for CAFOs in cooperation with the Department of Natural Resources and Environmental Control and according to the Clean Water Act and Federal Regulations.
>
> Performance Measure: Number of CAFO permits issued and administered.

	FY04 Actual	**FY05 Actual**	**FY06 Budget**	**FY07 Budget**	**FY08 Budget**	**FY09 Budget**
#of CAFO permits	1	1	2	5	7	10

		Actual	Actual	Budget	Budget	Budget	Budget
# of nutrient management farm Audits	19	15	15	20	25	25	

Recommendation (7): DWR should develop a strategy and associated SOPs on how DNREC will perform inspections or other types of surveys to determine the compliance of animal feeding operations within 5 years. If a third party will be conducting the field observations, the strategy should identify the SOPs that will be followed by the third party. The CAFO Strategy should be submitted to EPA as soon as possible, and a years worth of work in the strategy should be represented in the each years annual inspection plan until the requirements of the strategy have been met.

Stormwater-MS4s

DWR did not conduct an MS4 inspection during the review period resulting in an inspection frequency of 0%. However, with a universe of less than five facilities, applying the 20% minimum each year does not make sense.

Note: This report has already commented on how EPA and DNREC need to mutually agree on the requirements needed to be completed for bona fide inspections at various wet-weather sources in the annual inspection plan. No further recommendations are necessary.

Stormwater-Industrial

DWR conducts industrial stormwater inspections at permitted facilities about once every three years with follow-up visits, as necessary. During the review period the coverage frequency was 37% which is above the 20% standard.

Stormwater-Construction

For the construction site inspections, it is difficult to determine the inspection/site visit coverage of DSWC and the SSWM delegated authorities because there is no central database to track inspection data. DNREC provided their 2004 Enforcement and Compliance Annual Report, as a reference, which included compliance monitoring activity statistics. The statistics represented work performed by DSWC and the delegated authorities. With 1FTE, DSWC cannot conduct the approximate 287 inspections it would take to meet the minimum 20% inspection coverage

authorities monthly to discuss program issues including permittees who they have had difficulty in returning to compliance. DSWC will then conduct joint inspections at those construction sites. Based on the program design, there should have been a total of 37,258 (on the high side) of a combination of an on-site inspections performed by the state or the review of CCR reports submitted. Only 1200 off-site and 4500 on-site compliance monitoring activities were reported. This translates, at a minimum, to a 15% performance level of some sort of a compliance monitoring activity.

Note: Recommendation for an annual inspection plan is still applicable. No further recommendation is necessary.

2. Degree to which inspection reports and compliance reviews document inspection findings, including accurate description of what was observed to sufficiently identify violations.

Universe Data

Only 30 of the 32 files that were selected were reviewed. The 32 files selected (with notations on the changes) included:

4 municipal majors
1 with a combined sewer system
3 with a separate sewer system (including reports from EO for 1 facility)
4 industrial majors
2 municipal non-majors with DMRs
1 enforcement file
4 industrial non-majors with DMRs
4 industrial stormwater facilities/sites
1 concentrated animal feeding operation
13 construction stormwater sites
3 from DelDOT
3 from Sussex County
3 from the Town of Middletown
1 from DSWC (inspection reports were not provided)

Metric 2a	Percentage of inspection reports that are adequately documented	0/30 = 0%

Findings

The protocol allows the reviewers to use information from oversight inspections to evaluate this element. EPA did not perform any oversight inspections during FY 2004.

Recommendation (8): EPA needs to perform oversight inspections. These inspections should be negotiated as part of the annual inspection plan.

Delaware does not have any standard operating procedures for documenting inspections, except as provided by guidance in the inspection manuals cited in the Delegation Agreement. The protocols established in EPA's 1994 NPDES Compliance Inspection Manual is the benchmark. Using this manual as a point of reference, "The objective of an NPDES inspection report is to organize and coordinate all inspection information and evidence into a comprehensive, usable document." An inspection report should include a minimum of four elements, applicable to any state NPDES program, which are: NPDES Compliance Inspection Report Form 3560-3, supplementary narrative information, copies of completed checklists, and documentary support (e.g. photographs, sample results, maps, diagrams, facility records, etc.). Delaware's performance in each of these four elements is discussed in more detail below. Overall, the inspections performed by DNREC or on behalf of DNREC were not comprehensive. Checklists with minimal, if any, narrative statements serve as inspection reports with one exception. Sussex County does not use checklists (or did not provide them with the files), but rather just uses a brief narrative report. Although EPA encourages the use of checklists to help organize the information and serve as a reminder for information to be gathered, checklists are insufficient mechanisms in meeting the basic requirements of an inspection report.

Recommendation (9): DNREC needs to develop SOPs and training for writing inspection reports (including sample reports) to set a uniform standard.

NPDES Compliance Inspection Report Form 3560-3

DWR utilizes the NPDES Compliance Inspection Report Form 3560-3 from 1977 which is now obsolete for its reported CSIs at majors and traditional minors. Only 13 out of the 30 files reviewed had this form. At that time, it was included with a checklist for an on-site evaluation. Now, Form 3560-3 is no longer a checklist but serves a summary page. The checklist applicable to the 1977 version has been updated, as well as new checklists developed.

reviewed that had this comment, no sidebar comments were attached. There was no document in the files reviewed that demonstrated any of these facilities had any findings of noncompliance.

Recommendation (11): The SOP for writing inspection reports need to establish the level of detail needed in an inspection report, which includes documenting past noncompliance issues and the current status of the facility in resolving the noncompliance.

Supplementary Narrative Information

The inspector should state the permit requirement and describe observations or information gathered during an inspection. Supplementary narrative reports should cover basic information, such as who, what, when, where, why, and how much. The industrial stormwater files were the only ones that had this level of detail. However, it was done in the format of a letter that noted deficiencies rather than an inspection report.

Note: Sample inspection reports would be helpful and was already included in a previous recommendation.

Copies of Completed Checklists

When checklists were used, they were complete for the most part.

Documentary Support

Only one file had pictures. The pictures were not contained in a comprehensive inspection report. There was no photo log with the level of detail needed to make the photographs credible evidence, such as an identification number, who took the photo, date, time of day, weather conditions, location, and brief description of each subject being photographed. When reviewers asked why there were no inspection reports for the DWR files, we were told that the inspectors keep them on their computers.

Recommendation (12): The SOP for writing inspection reports needs to require photographs that are taken in the inspection report with validating information about the photograph.

3. Degree to which inspection reports are completed in a timely manner, including timely identification of violations.

Metric 3a	Percentage of inspection reports which identify potential violation in the file within a given time frame estalished by the Region and/or State	3/

Background:

The national Enforcement Management System for the NPDES programs, revised in 1986, embodies all EPA guidance and policies related to compliance monitoring, compliance tracking, and enforcement activities, including the requirement for states to establish Violation Review Action Criteria (VRAC) (consistent or more stringent with EPA's VRAC) as part of their pre-enforcement screening procedures (see bullet #3). The principles of the EMS also apply to all NPDES regulated facilities, and not just to a select few. Therefore, the state EMS should also have procedures in place for how compliance information from third party sources will be evaluated to identify potential violations. An EMS should:

1. Maintain a source inventory that is complete and accurate.
2. Handle and assess the flow of information available on a systematic and timely basis.
3. Accomplish a pre-enforcement screening by reviewing the flow of information as soon as possible after it is received.
4. Perform a more formal enforcement evaluation where appropriate, using systematic evaluation screening criteria.
5. Institute a formal enforcement action and follow-up where-ever necessary.
6. Initiate field investigations based on a systematic plan.
7. Use internal management controls to provide adequate enforcement

Findings

Under this element, the review team is to evaluate the process used by the state for reviewing inspection reports against VRAC and identifying potential violations in a timely manner. The process should be written and included in the state's EMS. Many of the principles of an EMS are found in the DNREC Compliance Enforcement Response Guide dated September 2002 (the "Delaware ERG"); however, the review team found that the Delaware ERG does not establish any VRAC or procedures for reviewing inspection reports for the NPDES program.

In the water enforcement program, inspection reports should be completed within 30 days from the date of the inspection or date the sampling results are received as required by the Delegation Agreement. A complete inspection report has all the information needed to make a compliance

considering the option. The program evaluation reports for the delegated authorities were provided to the review team. The tri-annual reviews did not address the performance of the delegated authorities in reviewing inspections and identifying violations.

The only written means provided by DNREC for documenting their compliance determination is an NOV which is not part of the pre-enforcement screening process being evaluated under this element. How NOVs fit into the Delaware ERG is described for state programs. It states, "Decisions on whether additional information is needed from the regulated entity should be made as soon as possible, consistent with the nature of the inspection and the complexity of the records that must be reviewed. For simpler/more straightforward violations or situations, the target is 1 to 10 calender days from the inspection date; for more complicated violations or situations, the target is 5 to 25 calendar days from the inspection. Conclusions about what violations exist should be reached within 10 calendar days of having complete information. If the decision is to issue a Notice of Violation (NOV) or Letter of Deficiency (NOD), the NOV/NOD should be issued within 30 calendar days of reaching the decision." This seems to imply that for state programs, an NOV/NOD would be issued within 75 days from the date the violation was detected.

Note: If a violation is detected at a major, the single event violation would need to be entered within 45 days from the date of the inspection or sample results are received. Therefore, the state time frames may be inadequate for majors.

When DNREC issued an NOV as an enforcement response to violations detected during an inspection within 75 days from the date of the inspection, then credit was given for Metric 3a. The NOV had to meet the definition of an NOV in the Delaware ERG. There were 3 files that met this criterion, 1construction stormwater site and 2 industrial stormwater facilities. The industrial stormwater facilities did not call the letters "NOVs". They were cover letters to the inspection report, but the letters seemed to meet the definition of an NOV. The review team found violations for which no NOV was issued within 75 days from detection in xx of the files reviewed.

Recommendation (13): DNREC needs to develop and implement pre-enforcement screening procedures consistent to the national EMS and document in the Delaware ERG.

4. Degree to which significant violations are reported to EPA in a timely and accurate manner.

Metric 4a1	Single event violations reported at majors to national system (PCS) non automated violations arising from inspections and compliance monitoring	280	0
Metric 4a2	Single event violations reported at non-majors to PCS	2,550	N/A
Metric 4b1	Facilities in SNC	1,230	1
Metric 4b2	SNC Rate	17.9%	4.8%
Metric 4c	Wet weather SNC placeholder	N/A	N/A

File Metric

Metric 4d	Percentage of SNC determinations from inspections that are accurately reported	Cannot be determined

Background

In the NPDES Program, significant violations are termed, "Significant Noncompliance" or SNC. The SNC applies to major permittees subject to the Quarterly Noncompliance Reports. SNC includes:

- any monthly average effluent violation that meets the Technical Review Criteria (TRC), for the same parameter at the same outfall, occurring at least two months within a six month period,
- any monthly average effluent violation, for the same parameter at the same outfall, occurring at least four months within a six month period,
- any effluent violation that causes or has the potential to cause a water quality or public health problem,
- any violation of a compliance schedule milestone date by 90 days or more (i.e., start construction, end construction, attain final compliance),
- any report late by 30 days or more,
- any violation of permit requirements (pretreatment program, narrative

Delaware does input DMR data for majors and minors into PCS. However, Region 3's PCS database administrator recently noted that the statistical base codes had not been entered timely. This data entry error was corrected by the DWR, but was applicable during the review period. A statistical base code denotes the type of permit limit (e.g. monthly average, daily maximum, etc). This has a direct impact on PCS executing SNC runs accurately.

Another SNC criteria is "any violation of a permit" condition. These are entered into PCS as SEVs. DNREC did not enter any SEVs as a result of inspections, DMRs, or any other compliance monitoring information for any majors. For the most part, the inspection reports were reviewed as evidenced by management signature. But none of the 7 major files reviewed from the DWR files had any documentation of any findings (compliance or noncompliance). Of the 7 major files reviewed, 4 files had information that seemed like violations of narrative conditions had been detected. Due to the insufficient documentation of inspection reports (as discussed under Element 2), compliance determinations could not be made by the review team.

For majors, any unpermitted discharges, including SSOs, are SEVs that must be entered into PCS and manually flagged as SNC. Unauthorized discharges, such as SSOs, are called into the Environmental Officers who contact the appropriate programs for resolution. During the review, EPA was provided a list of discharges and selected one major facility for review. Of the five discharge reports reviewed, one had sufficient information that documented an SSO from a major source to the St. Jones River. DWR was contacted. This was not entered into PCS. Therefore, at least one major had an SNC violation that was not reported to EPA in a timely fashion.

As for compliance schedule SNC instances, no compliance schedule milestones were in PCS during FY 2004.

For the review period, PCS reported a 0% SNC rate for Delaware. But this value may not be accurate due to the statistical base codes issue. Based on the file review, EPA believes the SNC rate is at least as high as 4.8%.

Note: Inspection reports should provide adequate documentation in order to make a compliance determination. Improvements on the quality of inspection reports and developing a pre-enforcement screening process will help ensure that the reviewer has adequate documentation to make a compliance determination. Any violation of a narrative condition at a major constitutes SNC and should be entered into PCS as a single event violation with the SNC coding within 45 days of the date of the inspection (or the date that sample results were

5. Degree to which the State enforcement actions require complying actions that will return facilities to compliance in a specific timeframe.

Data Metrics -None

File Review Metrics

	Descripton	**Delaware Total/Average**
Metric 5a	Percentage of formal state enforcement actions that contain a compliance schedule of requried actions or activities designed to return the source to compliance. This can be in the form of injunctive relief or other comply actions.	0/1 = 0%
Metric 5b	Percentage of actions or responses other than formal enforcement that return source to compliance.	½ = 50%

Findings

Formal Enforcement Actions

EPA reviewed the only file with a formal enforcement action. The formal enforcement action was in the form of a Notice of Administrative Penalty Assessment and Order (APO) issued to a traditional minor by DWR. The APO contained no compliance schedule; and, the facility is still in noncompliance at the time of writing this report.

Recommendation (15): When taking a formal enforcement action, the steps needed to return to compliance should be included. If the cause of the non-compliance has not been determined, the facility should be required to conduct a study to determine the cause of the violations and whether treatment plants need to be upgraded to comply with the standard or if operational changes would adequately address the problem. The findings of the study should be implemented. There should be dates by when each complying action will be achieved.

issuance of the NOV that still cited the violation. For the types of violations cited, two weeks seemed to be an insufficient amount of time to address the violations. No further documentation was available.

Note: DSWC needs to ensure that inspection and enforcement files are complete. Reports for site visits/inspections should document past noncompliance and the facility's progress toward returning to compliance. The documentation should reference any applicable time frames given to the facility to return to compliance. If time frames are not achieved, escalating enforcement is appropriate (see Recommendation #11).

6. Degree to which the State takes enforcement actions, in accordance with national enforcement response policies relating to specific media, in a timely and appropriate manner.

Data Metrics

	Description	**National Total/Average**	**Delaware Total/ Average**
Metric 6a	Exceptions rate	3.0%	Cannot be determined
Metric 6b	Number of actions taken by state in fiscal year	2,253	1

File Metrics

Metric 6c	Percentage of SNCs addressed appropriately	Cannot be determined

Background

The national program's guidance for timely and appropriate enforcement is EPA's EMS for the NPDES program revised in 1986. The EMS embodies all EPA guidance and policies related to compliance monitoring, compliance tracking, and enforcement activities, including timely and appropriate enforcement responses. According to the national EMS for the NPDES program, the state's EMS is subject to review. The EMS allows flexibility to the states, but should be

identified with the applicable time frame for implementing that response. The state EMS should have a process to track the compliance status of the violator. If compliance is not compelled, enforcement responses should be escalated. When penalties are appropriate, the penalties should be assessed based on a penalty policy. The penalty policy in the Delaware ERG is not related to the various degrees of violations, and does not discuss how economic benefit will be assessed. DNREC has identified various tools for enforcement responses (and time frames for state programs only), but has not provided a prescriptive discussion on how the EMS principles, just described, have been applied to the NPDES program.

Findings

Under this measure, the state's performance is based on EPA's national goal in the water enforcement program to maintain an exception rate below 2%. This means that a state's enforcement response plan should ensure that an enforcement action takes place to ensure a facility is not in SNC for two consecutive quarters. The exceptions rate was reported as 0%. The file review revealed one major source in SNC but it was not documented that the facility returned to compliance. No enforcement was taken.

Only one formal enforcement action was taken. DWR issued a Notice of Administrative Penalty Assessment and Order (APO) to a minor source in January 2004 for violations beginning December 2002 through October 2003. However, no NOV was issued as a preliminary response, only a verbal warning was given; and, according to the state's ERG, a verbal warning alone is not an appropriate enforcement response. In the Delaware ERG, an NOV is discussed as being an appropriate minimal response, but DNREC has not specified the degree of violation that triggers an NOV or the time frame for issuing NOV. An APO is not discussed in Chapter 4 of the Delaware ERG as an enforcement response tool. Chapter 4 describes the rational for how DNREC determines the appropriate response to noncompliance, yet fails to describe the circumstances for opting to issue an APO or, for that matter, an APO in the absence of an Administrative Order. Administrative penalty assessments are not discussed until Chapter 5 where the type of action is defined. Chapter 8 discusses how environmental improvement projects can be part of an enforcement settlement. No where in the Delaware ERG does it discuss what type of circumstances an APO is issued to a facility in noncompliance with its NPDES permit, or for failure to obtain an NPDES permit. There are also no time frames established for issuing an APO. The APO contained no compliance schedule; and, the facility is still in noncompliance at the time of writing. The respondent requested a hearing, but DNREC has not responded to the request. DNREC failed to take an appropriate action to compel compliance or collect the assessed penalty. In April 2005, the case was referred to EPA.

No enforcement response when violations detected

DWR is using verbal warnings and inspections as enforcement responses. Phone calls or follow-up inspections may be appropriate informal enforcement responses. These are not adequate enforcement responses to violations detected during inspections. The State's ERG concurs that "A verbal warning alone is not an appropriate enforcement response to the occurrence of noncompliance. When a verbal warning is given, it should be supported by an appropriate enforcement response, e.g. a written notice alleging noncompliance (NOV) or a penalty assessment."

The stormwater construction sites receiving the NOVs were referred by delegated authorities to DSWC for enforcement relatively quickly from the initial detection of noncompliance. DSWC has not provided guidance to the delegated authorities for when violations by a facility warrant enforcement and should be referred to DSWC. Other files reviewed for construction stormwater sites had documented violations that seemed to be serious in nature and long in duration, without being referred.

Recommendation (16): DNREC should update its ERG for the NPDES program to be consistent with EPA guidance on enforcement response plans in the national EMS. There should be specified enforcement responses and associated time frames for the VRAC. The principles of the EMS are to apply to all NPDES regulated facilities.

7. Degree to which the state includes both gravity and economic benefit calculations for all penalties.

Data Metrics -None

File Metrics

Metric 7a	Percentage of formal enforcement actions that include calculation for gravity and economic benefit consistent with applicable policies	0/1 = 0%

Findings

The only formal enforcement action was an APO. It was difficult to ascertain how gravity and economic benefit calculations were considered since documentation of the penalty calculation

8. Degree to which final enforcement actions (settlements or judicial results) take appropriate action to collect economic benefit and gravity portions of a penalty, in accordance with penalty policy consideration.

Data Metrics

	Description	**National Total/Average**	**DE Total/ Average**
Metrice 8a	Total amount of penalties entered into PCS	$8,000,339	$85,000
Metric 8b	Percent of enforcement actions with penalty	44.3%	100%

File Metrics

	Description	**DE Total/ Average**
Metric 8c	Percentage of final enforcement actions that appropriately document penalties to be collected	0/1 = 0%
Metric 8d	Percentage of final enforcement actions resulting in penalties	0/1 = 0%

Findings

The only formal enforcement action was an APO. In the APO, DNREC assessed a penalty in the amount of eighty-five thousand dollars ($85,000). EPA was told that the respondent requested a hearing, as set forth in the administrative action. However, a hearing was not scheduled, nor was the matter settled. The Delaware ERG states, "The Board shall schedule, but not necessarily conduct, a hearing within 30 days following the receipt of the appeal. The EAB shall conduct, but not necessarily complete the hearing within 180 days following the receipt of the appeal unless the parties agree otherwise. This case remains open, and there is no final enforcement settlement action to review for this element. Enforcement data was not entered into PCS to be reflected in Data Metrics.

9. Enforcement commitments in the PPA/PPG/categorical grants (written agreements to deliver product/project at a specified time), if they exist, are met and any products or projects are complete.

Data Metrics- None

File Metrics

	Description	**DE Total/ Average**
Metric 9a	State agreements (PPA/PPG/SEA, etc) contain enforcement and compliance commitments that are met	1

Findings

States submit their annual inspection plan to EPA for review with the State Section 106 program plan. The Section 106 plans contain a state's enforcement and compliance commitments. DNREC as not submitted an annual inspection plan in over 9 years. (See recommendation #1)

10. Degree to which the Minimum Data Requirements are timely.

Data Metrics -None

File Metrics

	Description	**DE Total/ Average**
Metric 10a	Regions should evaluate what is maintained in PCS by the State and ensure that all minimum data elements are properly tracked and entered according to accepted schedules.	NA

Findings

This element focuses on data necessary to develop Quarterly Noncompliance Reports (QNCRs).

11. Degree to which the Minimum Data Requirements are accurate.

Data Metrics

	Description	National Total	DE Total
Metric 11a	Number of enforcement actions without EVTP	1,735	0

File Metric

	Description	Delaware Total
Metric 11b	Accuracy of WENDB data elements	NA

Findings

Three (3) enforcement actions are being listed as not being linked to violations. There were no enforcement actions for these facilities. The intended information was coded incorrectly as enforcement actions. This has been corrected.

12. Degree to which the Minimum Data Requirements are complete, unless otherwise negotiated by the Region and State or prescribed by a national initiative.

Data Metrics

Description
National Total
DE Total

	Description	National Total/Average	DE Total/ Average
Metric 12a1	NPDES Majors	6,856	21
Metric 12a2	NPDES non-majors with DMRs	44,857	33

Metric 12c2	DMR entry rate	62.7%	92.3%
Metric 12d1	# of facilities inspected	25,237	30
Metric 12d2	Total # of inspections performed	40,048	556
Metric 12e	Reserved (SEV linked to inspections)	NA	NA
Metric 12f1	# of facilities with state NOVs	4,705	2
Metric 12f2	Total # of state NOVs	6,035	2
Metric 12g1	Noncompliance rate in database at non-major facilities	39.2%	5.9%
Metric 12g2	Noncompliance rate reported to EPA under the ANCR	Not Calculated	8.1%
Metric 12g3	Number of facilities in database with DMR non-receipt for three continuous years	3,758	0
Metric 12h1	Facilities with formal actions	1,833	1
Metric 12h2	Total formal actions taken	2,253	1
Metric 12i1	Action with penalties	998	1
Metric 12i2	Total state penalties	$8,000,339	$85,000
Metric 12j	Facilities with compliance schedule violations	1,095	0
Metric 12k	Facilities with permit schedule violations	850	0

Findings

Metric 12a1/12a2/12a

The source inventory for majors and traditional minors is maintained in PCS. In addition, DWR has also entered in an MS4 and a CAFO. All other NPDES facilities are missing, such as industrial and construction stormwater. Notice of Intents (NOIs) for construction sites is maintained on DNREC's website. Sources for industrial stormwater are maintained on an electronic spreadsheet.

Metrics 12b2/12c2

DMR entry rate is above national averages for majors and traditional minors, 97.6% and 92.3% respectively.

Metric 12d

Inspection data for majors and traditional minors seems to be complete. The inspection files reviewed did not indicate additional inspections were done and not entered into PCS. However, inspection files lacked inspection reports for the recon inspection data reported. Under Delaware's MOA, a recon inspection is not a recognized inspection. Therefore, the inspection numbers were changed to reflect the inspections for which the review team gave credit to DWR.

Recommendation (19): DNREC needs to improve its means of tracking inspections at other non-majors.

Metric 12e

EPA is currently revising the SEV guidance to specify how to link SEVs to inspections.

Metric 12f1/12f2

The number of NOVs issued is accurate for the universe maintained in PCS. DSWC issued 2 NOVs, but were not entered into PCS and are not planned to be entered.

Metric 12g1/12g2

PCS seems to be counting non-majors that do not submit DMRs in its calculation of noncompliance rate for non-majors. Delaware's ANCR is based only on the traditional minors.

Recommendation (20): ANCRs need to reflect all non-major NPDES facilities.

Metric 12g3

Delaware NPDES facilities seem to be diligent in ensuring DMRs are submitted timely; and DWR is diligent in entering the DMR data.

The data in PCS is complete. There were no open enforcement actions with compliance schedules to be entered into PCS. No permit schedules were entered into PCS.

Delaware Compliance and Enforcement Evaluation
Resource Conservation and Recovery Act (RCRA) Program Media

Introduction

The RCRA portion of the evaluation entailed reviewing 37 inspection/enforcement case files, primarily from federal fiscal year 2004. The Region gathered data directly from RCRAInfo (the RCRA-C program's national data system), and EPA HQ supplied data from OTIS for additional state specific and national average information. The information from the file reviews and data pulls were used to answer specific questions covering 12 topics of element areas regarding State inspection implementation, State enforcement activity, State Grant Work Plan agreements, and data integrity.

The files reviewed were not randomly selected. The files selected for review included the universe of Significant Non-Compliers (SNCs) identified by the State in FY04, facilities in which the State had taken enforcement action, and facilities for which multiple inspections were performed in FY04. After these facilities were identified, the remaining facilities were randomly selected facilities which had been inspected by the State during FY04. Therefore, a high percentage of the facility files which were selected for the review had a history of violations and would not be considered a "neutral" selection of the universe of Delaware facilities; further, findings cannot be extrapolated to the State program as a whole.

Element 1 - Degree to which State program has completed the universe of planned inspections (addressing core requirements and federal, state, and regional priorities).

Core Program - Inspection coverage for Operating Treatment, Storage and Disposal Facilities TSDFs - Goal is that all operating TSDFs should be inspected every two years. Time frame of the data pull is FY03 and FY04.			
Delaware only	National Average (State only)	Delaware and EPA Region 3 combined	National Average (Combined)
100%	90.4%	100%	93.4%
Core Program - Annual inspection coverage for Large Quantity Generators (LQGs) Time frame of the data pull is FY04.			
Delaware only	National Average (State only)	Delaware and EPA Region 3 combined	National Average (Combined)
31%	28.8%	32%	30.8%
Core Program - Five year inspection coverage for LQGs. Time frame of the data pull is FY00 through FY04.			
Delaware only	National Average (State only)	Delaware and EPA Region 3 combined	National Average (Combined)
74%	66.7%	79%	71.4%

Of the 16 LQGs not inspected from FY00 through FY04, four were inspected in FY05, eight are scheduled for inspection in FY06, and four appear to no longer be LQGs.

Element 2 - Degree to which inspection reports and compliance reviews document inspection findings, including accurate description of what was observed to sufficiently identify violations.

This element was satisfied to a high extent. In all cases, the inspection report adequately documented inspection findings, and all included accurate description of what was observed to sufficiently identify violations. All inspection reports included a narrative of observations and findings, 94% of compliance evaluation inspections included a completed checklist, and 40% of

Element 4 - Degree to which significant violations (e.g., significant noncompliance and high priority violations) and supporting information are accurately identified and reported to EPA national database in a timely manner.

Delaware preformed 82 inspections in FY04, and identified no SNC violations based on violations identified during those inspections. Two State-identified SNC violations were in the system during the time of the review - these violations had been identified in FY03, and have not yet been resolved. The State took two formal enforcement actions during FY04, and both were related to facilities which had been identified in SNC status in RCRAInfo.

	Delaware	National
SNC identification rate (per 100 inspected facilities)	0%	3.2%
Number of SNCs identified in the State in FY04	0	576
SNC reporting indicator (percentage of formal actions taken during FY04 that received a prior SNC listing)	100%	55.5%

Of the files reviewed where violations were identified, all violations were entered into RCRAInfo.

Facilities with violations accurately reflected in RCRAInfo	29
Facilities with violations not entered into RCRAInfo	0

The DNREC Compliance and Enforcement Response Guide (September 19, 2002) defines Significant Non-Compliers as "facilities that cause an actual exposure or a likelihood of exposure to hazardous waste or its constituents, or a solid waste posing a substantial threat to public health or the environment. The SNC designation is also given to recalcitrant or chronic violators, those that substantially deviate from the requirements of statute or regulation, a permit, order or agreement. A facility may also be classified as a SNC, should it fail to achieve compliance in the timeframe specified by the Department."

Of the files reviewed, two facilities were identified by the State as SNC violators, and this data was entered into RCRAInfo; both of these SNCs had been identified prior to FY04. Of the other files reviewed, there was only one instance (facility #10) where the reviewers

were referred to the State Attorney General's office for enforcement follow up.

Facilities identified with violations	29
Facilities issued NOVs which required injunctive relief	20
Facilities issued NOVs which did not require injunctive relief, as compliance was demonstrated prior to issuance of the NOV	4
Facilities issued Warning Letters	2
Facilities referred to the State Attorney General for enforcement	2
Action deferred to EPA on EPA lead inspection	1
Facilities where violations returned to compliance	27

All violations have returned to compliance. Notices of Violation issued by the State typically include injunctive relief requiring a return to compliance, except in instances where compliance has been demonstrated before the issuance of the NOV (such as corrections made during the inspection). In certain instances (particularly for very small facilities), compliance was verified by a re-inspection of the facility. The two Warning Letters were sent in response to violations identified during record reviews (as opposed to on-site inspections); in one instance, a review of manifest information demonstrated failure to notify under a new name, in the other, manifest review revealed a change in the generator's status (LQG vs CESQG).

Element 6 - The degree to which a state takes timely and appropriate enforcement actions, in accordance with policy relating to specific media.

The reviewers found all enforcement actions to be both timely and appropriate. The large majority of actions were NOVs, and all were issued within 150 days of violation identification. The only potential timeliness issue is with regard to the two cases referred to the State Attorney General. While the referrals were made in a timely fashion, the SAG has yet to issue any enforcement action. However, the reviewers recognize that SAG actions and timing of these actions is largely outside the control of the Department.

Element 7 - Degree to which the state includes both gravity and economic benefit calculations for all penalties, appropriately using the BEN model of consistent state policy.

"Consent Orders with civil penalties are levied in instances where solid or hazardous waste violations result in a release or have an environmental impact; when a site has a history of being recalcitrant or a chronic violator; or when there has been a economic benefit from non-compliance. For the hazardous waste program, civil penalties are calculated utilizing the RCPP, while the solid waste program utilizes a state-modified version of the document. The penalty for violations is calculated based on a determination of gravity based components, i.e., potential for harm and the extent of deviation from regulatory requirements, as well as economic benefits gained from non-compliance and penalty adjustments based on individual factors, for example, willingness to comply, history of non-compliance, or ability to pay. Recommendations along with justification are submitted through the Branch program managers to the Division's Paralegal for presentation to the Enforcement Panel."

For the two formal enforcement actions (referrals to the State Attorney General), it appeared that penalty calculations were performed, including both economic benefit and gravity components. In both cases, however, it appears that the penalties, as calculated, were high when compares to other sites with similar violations (the reviewers agree with this assessment); consequently, a much lower penalty figure was proposed. As the cases are not finalized yet (no final action has been brought by the State Attorney General) and no penalty has been assessed, it is not possible to fully assess the degree to which this element was satisfied.

Element 8 - Degree to which penalties in final enforcement actions include economic benefit and gravity in accordance with applicable penalty policies.

As no final enforcement actions were concluded during the review period, it is not possible to fully assess the degree to which this element was satisfied.

Element 9 - Degree to which enforcement commitments in the PPA/PPA/categorical grants (written agreements to deliver a product/project at a specified time) are met and any products or projects are completed.

The following inspections were accomplished by DNREC in FY04, in accordance with their grant work plan:

Facility Type	Commitment	Accomplishment
Federal TSDs (See NOTE below)	1	1

The State Program Review Report - FY04 End of Year (January 7, 2005) stated:

"During FY04, DNREC entered and managed its RCRAInfo and BR data timely and effectively, and submitted its 2003 BR data on time."

"Delaware continues to provide a strong regulatory presence though implementation of its compliance and enforcement program in the RCRA Subtitle C program area. EPA is pleased with the progress made in FY04 and, based on currently available data, the State has met its grant commitments and goals for the grant period."

Elements 10/11/12 - Degree to which the Minimum Data Requirements (Nationally Required Data Elements for the RCRA program) are timely/accurate/complete.

This element was met to a very high extent. All violations identified in the inspection reports (29 of 29) were entered into RCRAInfo. All inspection records (37 of 37) were entered into RCRAInfo. All enforcement actions (28 of 28) were entered into RCRAInfo; the date of these actions are entered in the system as the date the facility received delivery of the NOV (as documented on the certified mail green card), as opposed to the date the NOV was signed. Of the 29 facilities with violations identified during the review period, all but the two cases referred to the SAG had violations returned to compliance (closed) in RCRAInfo (27 of 29). In fact, the reviewers noticed that often the violations for one case had individual dates for "return to compliance", to properly correspond with the facts related to physical return to compliance. For instance, those violations which were corrected at the time of the inspection had a "return to compliance" date corresponding with the date of inspection, while other violations documented during the same inspection had a "return to compliance" date which corresponded to the date which documentation of compliance was provided to DNREC. This demonstrates a very high level of attention to detail with regard to data management, which we commend.

Overall, we found the State's files and documentation to be very well organized. In addition, the enforcement documents (NOVs) follow a logical, systematic process which clearly identifies what the facility physically did wrong, and how this action translates into a violation of regulation.

(Final 3/9/06)

Clean Water Act (Water) in Delaware to DNREC. DNREC's NPDES enforcement and compliance assurance program is shared among DNREC's Divisions of Water Resources(DWR), Soil and Water Conservation (DSWC) and the Delaware Department of Agriculture (DDA). DWR has primary responsibility for municipal and industrial "point source" discharges of process wastewater and stormwater except stormwater related to construction sites. DSWC has primary responsibility for stormwater discharges related to construction activity and maintains oversight of the delegated authorities who administer certain elements of Delaware's Sediment and Stormwater Management program. DNREC maintains delegation for enforcement of NPDES permits issued to CAFOs. Certain activities such as inspections and informal compliance responses are conducted by DDA who administers Delaware's Nutrient Management Act.

DNREC's Air and RCRA programs provide EPA Region III with a grant work plan which include commitments for inspections, a commitment to timely and appropriate enforcement and a commitment to enter the inspection and enforcement activity into their respective data bases. However, DNREC's Department of Water Resources (DWR) does not provide EPA with a plan for meeting their 106 grant requirements or their obligations pursuant to their delegation agreement. Developing a plan would enable DWR to establish a formalized process for setting goals for the NPDES program based on environmental or compliance monitoring data in order to prioritize their inspection activities to meet federal, state and local priorities. Additionally, an automated tracking system to track non-compliance is needed. DWR has entered into a management agreement with EPA Region III which includes providing these compliance and enforcement commitments for FY-07,as well as address the recommendations found in this report.

The RCRA program found no deficiencies with regards to number of inspections and timely and appropriate responses, however, they did find timeliness issues with two cases that were referred to the State Attorney General's (SAG) office. The Air program found no deficiencies in the number of inspections, but did have recommendations regarding the identification of High Priority Violations (HPV) and in some instances the timeliness in addressing HPVs. The Air program also noted timeliness issues due to the bottlenecks at the State Attorney General's office. EPA acknowledges that DNREC is not able to influence the timeliness in

due to the lack of information in the inspection reports. DWR issued three enforcement actions, two informal and one formal action during FY-04.

Inspection Implementation (Summarize findings and recommendations for Elements #1, 2 & 3)

Element #1 Completing universe of planned inspections

CAA -DNREC's Compliance Monitoring Strategy (CMS) commitments exceed national minimum suggested frequency of one Full Compliance Evaluation (FCE) every two years for major sources, one FCE every five years for SM-80 sources, and one FCE every three years for mega-sites, i.e., DNREC commits to complete an FCE at every major source once during FY2004 or FY2005, at every 80-percent synthetic minor source (SM-80) once during FY2004 or FY2005, and at its one mega-source once every three years.

Recommendations

(1) DNREC has committed to complete, in FY2006, an FCE at its one mega-source. Should DNREC continue to experience difficulties in completing its FCE at this mega-source on schedule, DNREC should consider redirecting resources to complete this commitment, such as by reducing its inspection frequency at SM sources where DNREC's FCE frequency commitments exceed that required in the CMS. During the first quarter of FY2005, DNREC did complete the FCE at the other major source which was overdue for an FCE. *Action: As of March 2006, DNREC reports they are on schedule to complete the FCE for its outstanding mega-source.*

(2) **Federal Recommendation:** Although DNREC well exceeded the national average for completion of CMS commitments, AFS under-reports DNREC's accomplishments because certain EPA classes did not match state classes in AFS. To remedy this problem, processes should be employed to ensure that EPA class is changed when state class is changed. *Action: Region III has recently enacted procedure to check changed state class in AFS and to make changes to EPA class where EPA has an action on facilities with such changes.*

should include inspection priorities that include core enforcement requirements, which reflect state, regional, and national priorities. Delaware should identify a date when an annual inspection plan will be submitted to EPA and a system for tracking their progress.

DNREC Response: DWR explained they do not use 106 grant federal funding for compliance and enforcement activities and, therefore, do not make commitments in the 106 work plan for these activities for which EPA is not funding.

Recommendation (2): The number of inspections and the level of detail of the inspection performed by DNREC staff needs to be formalized annually to meet the requirements of the Delegation Agreement at the same time as the 106 grant workplan. EPA is flexible as to whether the plan is negotiated as apart of the 106 grant or as a separate document. The inspection plan should:

- Reflect the compliance monitoring activities for the NPDES regulated community.
- Specify the timeframe and the work to be performed by DWR, DSWC and EPA,
- Identify the facilities selected randomly to be inspected by DNREC based on a neutral targeting scheme (e.g. based priority watersheds, environmental indicators, sectors, historical compliance rates, etc.)
- Identify any special investigations,
- Consider state, national, and regional priorities in developing criteria,
-Consider available resources to ensure the schedule can be reasonablely accomplished,
-Identify the level of inspection to be conducted conforming to the most recent inspection guidance,
-Discuss alternative approaches to ensure minimal inspection coverage if resources prevent DNREC from inspecting 100% of majors and 20% of non-majors.
- If alternative approaches include third parties, EPA would need agreement on the level of detail required by the third party to count toward the inspection level, the procedures in place to ensure the performance of the third party, and procedures in place to make compliance determinations of the facilities either by DNREC or by the third party

Recommendation (3): DWR needs to conduct a CEI, CSI, CBI, or PAI at 100% of the majors. If circumstances necessitate a different inspection type, DNREC should make the necessary changes to the inspection schedule with concurrence from EPA.

Recommendation (4): DNREC should develop SOPs for conducting recon inspections which must include the level of documentation required to be consistent with the most recent EPA guidance.

Recommendation (5): DWR should develop SOPs and training for conducting CSIs, including the collection of samples, pursuant to the September 1994 NPDES Compliance Inspection Manual and all applicable regulations. DWR is required to perform chemical analysis on all parameters with effluent limits and any parameter that is suspected to be in the effluent at levels that may impact water quality standards. When developing an inspection schedule, DNREC should ensure sampling events are more random from year to year and that staff has adequate equipment and time to conduct and document the CSIs.

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Recommendation (6): DWR should develop SOPs for conducting inspections and/or surveys to ensure the municipalities comply with the permitting requirements for any unpermitted discharges, such as an SSO. Inspections should be entered into PCS (unpermitted facilities can be entered into PCS). Entering the inspection and findings in PCS will help to establish the inventory of municipalities with SSOs. To assure a comprehensive survey, DWR should develop SOPs for coordinating and updating the inventory in PCS of any known unauthorized discharges, including self or citizen reported SSOs, reported to the EOs spill response line. This information is needed to help develop the annual inspection plan.

Recommendation (7): DWR should develop a strategy and associated SOPs on how DNREC will perform inspections or other types of surveys to determine the compliance of animal feeding operations within 5 years. If a third party will be conducting the field observations, the strategy should identify the SOPs that will be followed by the third party. The CAFO Strategy should be submitted to EPA as soon as possible, and a years worth of work in the strategy should be represented in the each years annual inspection plan until the requirements of the

include enforcement history, especially recent enforcement history, to ensure that violations/deficiencies previously discovered are no longer occurring. CMRs also should include a summary of the facility including the product manufactured at the source, a general process description, size of the units inspected, and a detailed description of any units which were found to be in violation. CMRs should list excess emissions reported during the period under review along with all stack tests and results of stack tests. *Action: DNREC has updated its inspection report templates to include the above information. All inspectors are expected to use these templates when developing inspection reports.*

(2) DNREC should conduct training or otherwise communicate to its inspectors that EPA requires Title V certification results to be listed as "failed" if any violations are reported for the year covered in the certification or DNREC on its own concludes that the source was in violation during the reporting period. *Action: DNREC sent an e-mail to all Engineers and Scientists in their Air enforcement program on February 27, 2006 notifying them of this requirement.*

As of August, 2005, 25 out of 86 stack tests performed at major and synthetic minor sources in FY2004 are listed with results code "99." This usually means that the results are "pending." According to DNREC, many of the stack test results in this metric were at the time in fact still pending. Where results are still "pending" and reports were submitted in accordance with the above requirements DNREC reviews do not appear to be timely. Should any of these stack tests show a failure, DNREC will have failed to identify this violation in a timely manner. This is viewed as a significant vulnerability.

CWA The protocol allows the reviewers to use information from oversight inspections to evaluate this element. EPA did not perform any oversight inspections during FY 2004.

Recommendation (8): EPA needs to perform oversight inspections. These inspections should be negotiated as part of the annual inspection plan.

Delaware does not have any standard operating procedures for documenting inspections, except as provided by guidance in the inspection manuals cited in the Delegation Agreement.

the level of detail needed in an inspection report, which includes documenting past noncompliance issues and the current status of the facility in resolving the noncompliance.

Recommendation (12): The SOP for writing inspection reports needs to require photographs that are taken in the inspection report with validating information about the photograph.

Element #3 Compliance Monitoring Reports completed in timely manner, including timely identification of violations

Recommendations Element #3:

CAA (1) Results of all stack tests should be entered in AFS in a timely manner. *Action: DNREC has instituted new procedures to ensure that all stack tests are entered in a timely manner.*

CWA Under this element, the review team is to evaluate the process used by the state for reviewing inspection reports against VRAC and identifying potential violations in a timely manner. The process should be written and included in the state's EMS. Many of the principles of an EMS are found in the DNREC Compliance Enforcement Response Guide dated September 2002 (the "Delaware ERG"); however, the review team found that the Delaware ERG does not establish any VRAC or procedures for reviewing inspection reports for the NPDES program.

Recommendation (13): DNREC needs to develop and implement pre-enforcement screening procedures consistent to the national EMS and document in the Delaware ERG.

Enforcement Activity (Summarize findings and recommendations for Elements #4, 5, 6, 7 & 8)

Element #4 High priority violations and supporting information are

violation is determined to be an HPV. *Action: DNREC has updated its template for itnernal memo that accompanies NOVs to include an HPV Discussion section.*

(2) DNREC should evaluate its processes used to determine whether a violation exists when the results of testing are not clear. If retesting is needed, this should occur in an expedient time frame in order to minimize the time when a source may be out of compliance. *Action: This recommendation was based on a one-time event related to a laboratory error. DNREC has resolved this problem with the laboratory and does not anticipate this problem to occur again.*

(3) DNREC should evaluate why three HPVs were reported to EPA more than 120 days after Day Zero and assess how such late reported may be avoided in the future. New HPVs may be reported to EPA outside of the periodic Timely and Appropriate meetings. Notices of Violation (**for HPV only)** are required to be sent on a monthly basis, so a simple transmittal form which identifies the violation as a new HPV, along with appropriate documentation of the basis for DNREC's determination, could serve as timely notification to EPA. The EPA then may evaluate the information provided, concur on the HPV recommendation, and enter the new HPV in AFS. *Action: DNREC is evaluating why these HPVs were reported late. In addition, DNREC's refined HPV determination process, described above as follow-up to Recommendation 1, are expected to improve HPV reporting timeliness.*

(4) DNREC should begin linking HPVs in AFS as soon as possible. Whereas EPA still is expected to concur on each HPV recommended by a state/local agency and must still receive the NOVs that document the violations, direct entry by DNREC would best ensure that the public, as well as the regulated community, is informed about high priority violations in a timely manner. EPA may then review DNREC's recent entries in AFS, compare the entry to the documentation provided by DNREC, and advise DNREC of any changes to AFS that may be needed regarding new HPVs. *Action: DNREC continue to work on program that will enable DNREC to link HPVs in AFS. DNREC declined to estimate a date by when this may be accomplished.*

CWA Based on Discharge Monitoring Report (DMR), permit or enforcement compliance schedule, and single event violation (SEV) data entered into the system, EPA's Permit Compliance System (PCS) can be used as a tool to

complying action (injunctive relief) that will return sources to compliance in a specified time frame.

Recommendations:

CAA (1) When a source is listed as an HPV, formal procedures are set forth in the *Timely & Appropriate Policy* to ensure that violations are not only addressed but also resolved, i.e., all activities necessary to return a source to compliance, along with penalties paid, are complete. Some state/local agencies have formal protocols in place to formally close out all enforcement activities, regardless of whether a violation is an HPV or not an HPV. Region III advises that DNREC should evaluate its processes to close out enforcement files to better ensure that all activities necessary to return a source to compliance and to document DNREC's review of those close-out activities. *Action: DNREC's Air Enforcement Program has developed an Enforcement Close-out Template to document DNREC's review of close-out activities.*

CWA EPA reviewed the only file with a formal enforcement action. The formal enforcement action was in the form of a Notice of Administrative Penalty Assessment and Order (APO) issued to a traditional minor by DWR. The APO contained no compliance schedule; and, the facility is still in noncompliance at the time of writing this report.

Recommendation (15): When taking a formal enforcement action, the steps needed to return to compliance should be included. If the cause of the non-compliance has not been determined, the facility should be required to conduct a study to determine the cause of the violations and whether treatment plants need to be upgraded to comply with the standard or if operational changes would adequately address the problem. The findings of the study should be implemented. There should be dates by when each complying action will be achieved.

Element #6 State takes timely and appropriate enforcement actions, in accordance with policy related to specific media.

CAA **58.3 percent** of Delaware's state or joint-lead HPVs in FY2004 remained unaddressed for more than 270 days (see Metric 6a), compared to a national

five addressed HPVs, six state-lead HPVs that were HPVs in FY2004 continue to be unaddressed.

Recommendations:

(1) Reviewers strongly recommend that DNREC should review each of the reported reasons for delay, along with others that DNREC may identify, and implement changes in its enforcement procedures to ensure that HPVs are addressed in a more timely manner. DNREC should also discuss with EPA whether a referral to the State Attorney General's Office can be considered an addressing action under the timely and appropriate policy. *Action: DNREC reports that the air enforcement "bottlenecks" encountered with State Attorney General's Office have been reduced substantially as a result of periodic coordination meetings that DNREC has initiated with the attorney assigned to DNREC's air enforcement cases. In addition, DNREC's air enforcement program is evaluating the enforcement process to determine if additional modifications can be instituted to more quickly address both HPVs and other violations.*

(2) DNREC should consider improved procedures to ensure that all violations are reviewed to determine if they meet HPV criteria and to document DNREC's HPV determinations for all major and SM sources found to be in violation. Whereas the CMS does not state that HPV determinations should be included in CMRs, if DNREC employs a Standard Operating Procedure to screen all violations against HPV criteria, the likelihood that DNREC would miss listing a source as an HPV is minimized. *Action: DNREC has revised its NOV internal memo template, as discussed in the follow-up under Program Element 3 to ensure that HPVs are determined in a more timely fashion.*

CWA Delaware ERG does not discuss the process for reviewing all inspection reports to identify violations or define the VRAC that will be used in the pre-enforcement screening process to initiate the appropriate enforcement response. The review team found a variety of enforcement responses including one formal enforcement response, verbal warnings and inspections as enforcement responses.

Recommendation (16): DNREC should update its ERG for the NPDES program

CAA In many of the files reviewed where formal enforcement action had been taken, information on enforcement actions, including penalties assessed, was not included with the main files. Penalty information, where provided to reviewers, was typically filed separately with the paralegal assigned to the case. Such separation of compliance monitoring files from enforcement files could hinder an inspector's ability to characterize the enforcement history of a source when completing a CMR. An incomplete enforcement history could hinder an inspector's ability to conduct the requisite follow-up at units that may have been problematic in the past.

Recommendations:

(1) DNREC should institute procedures to ensure that all penalty calculations are documented and maintained in compliance monitoring and enforcement files. *Action: DNREC's air enforcement program has directed its paralegal staff and case development staff to document all penalty calculations in an internal memorandum.*

(2) DNREC should move all compliance monitoring and enforcement files to one central location. *Action: State officials agree with this recommendation but only after the enforcement action is resolved. DNREC's air enforcement program is moving all resolved compliance monitoring and enforcement files to one central location. DNREC declined to provide an estimate of when the consolidation of files is expected to be completed.*

CWA The only formal enforcement action was an APO. It was difficult to ascertain how gravity and economic benefit calculations were considered since documentation of the penalty calculation was not maintained in the file.

Recommendation (17): The penalty policy for the NPDES program in DNREC's ERG is insufficient, and needs to ensure it is useable for determining the appropriate gravity and economic benefit portions of a penalty. The calculation for the assessed penalty needs to be maintained.

Element #8 Penalties in final enforcement actions include economic benefit and gravity in accordance with applicable penalty policies.

(1) To adhere with the *EPA Clean Air Act Civil Penalty Policy,* DNREC should institute processes to ensure that the bases for reductions in initial penalties are documented in all enforcement files. *Actions: As discussed in the follow-up discussion in Program Element 7, DNREC's air enforcement program has instructed its paralegal staff to document penalty calculation revisions in an internal memorandum.*

RCRA - Delaware performed 82 inspections in FY-04, and identified no SNC violations based on violations identified during those inspections. Two state-identified SNC violations were in the system during the time of the review. These violations were identified in FY-03 and had not been resolved as of the time of the file review. The state took two formal enforcement actions during FY04 and both were related to facilities which had been identified in SNC status in RCRAInfo. With exception to the two cases referred to the SAG for enforcement, all violations have returned to compliance. Notices of Violations issued by the state typically include injunctive relief requiring return to compliance, except in instances where compliance has been demonstrated before the issuance of the NOV. The reviewers found all enforcement actions to be both timely and appropriate. Two formal enforcement actions with penalties were referred to the SAG. The penalty calculations included economic benefit and gravity.

CWA The only formal enforcement action was an APO. In the APO, DNREC assessed a penalty. EPA was told that the respondent requested a hearing, as set forth in the administrative action. However, a hearing was not scheduled, nor was the matter settled.

Recommendation (18): When a hearing is requested by a respondent, DNREC needs to schedule the hearing or reach a settlement that collects adequate civil penalties (even if less than the sought penalty). Documentation of penalty calculations must be maintained.

Annual Agreements (Summarize findings and recommendations for Element #9)

DNREC's Air and RCRA programs provide EPA Region III with a grant work

Recommendations:

(1) DNREC should be commended for the notable improvement in compliance at dry cleaner area MACT sources as a result of DNREC's successful implementation of the Region III Area Source MACT Strategy in Delaware. In addition, aside from data problems cited above related to timely reporting of HPVs, DNREC should also be commended for its success in entry and maintenance of data elements into AFS.

(2) DNREC's late identification and reporting of HPVs is a significant vulnerability. See recommendations and actions under program element #4.

(3) Reviewers consider DNREC's untimeliness in addressing HPVs to be DNREC's most significant vulnerability in the air enforcement program. It is also recognized that the SAG's office plays a major role in timely addressing HPVs. Much of this delay, as it relates to the SAG's office, is outside the control of DNREC. See recommendations under program element #6.

<u>Data Integrity</u> (Summarize findings and recommendations for Element # 10, 11 & 12)

Element #10 minimum data requirements are timely

<u>CAA</u>
(1) See recommendations under program element #4 regarding late identification and reporting of HPVs.

(2) DNREC should begin to link its own HPVs in AFS, as this also is expected to improve the timeliness of entry of minimum data requirements. *Action: see recommendation #4 under program element #4.*

(3) **Federal Recommendation** EPA Headquarters is to revise federal guidance on stack tests, use of "pending" code, and clarify the time line required to enter date of test and "pass/fail" once results are known. *Action: revised federal guidance to be issued.*

<u>RCRA</u> - This element was met to a very high extent. All inspection records,

(1) Compliance status is a minimum data requirement. DNREC should investigate why the one HPV and eight sources that received NOVs in FY2004 were not listed as out of compliance during that period. *Action: DNREC has agreed to contact EPA in the future to request corrections to historical compliance as appropriate.*

(2) All stack test should be listed with either pass or fail results unless use of a "pending" code is accepted by Agency officials. Again, while this has not yet been officially accepted by EPA, it is under serious consideration. *Action: see program element #3. Revised federal guidance is pending.*

(3) See recommendations under program element #10 to improve DNREC's reporting of Title V certification reviews. *Action: see program element #2.*

Element #12 Minimum data requirements are complete.

CAA

(1) See recommendation under program element #11 regarding stack test results. *Action: see program element #11.*

(2) See recommendation #3 under program element #11 regarding entry of Title V annual certification reviews. *Action: see program element #11.*

(3) See recommendation #1 under program element #11 regarding entry of compliance status where violations were found that were not resolved within 30 days. *Actions: See program element #11.*

(4) See recommendation #2 under program element #6 to ensure that DNREC identifies all its HPVs in a timely manner. *Action: see program element #6.*

CWA The source inventory for majors and traditional minors is maintained in PCS. In addition, DWR has also entered in an MS4 and a CAFO. All other NPDES facilities are missing, such as industrial and construction stormwater.

Recommendation (21): DNREC needs to enter all formal enforcement actions into PCS.

Element #13

Thank you for your Element 13 submission. EPA appreciates the initiative that DNREC is taking to not only assure compliance with environmental regulations, but the outreach extended to teach the Delaware's regulated community how to comply with and go beyond compliance with environmental regulations.