Office of Inspector General

Audit Report

ENFORCEMENT

EPA's Multimedia Enforcement Program

Report No. 2000-P-000018

June 30, 2000

**Inspector General Division
  Conducting the Review:**   **Northern Audit Division**

Program Office Involved: **Office of Enforcement and
    Compliance Assurance**

Regions Covered: **Regions 1 through 10**

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF THE INSPECTOR GENERAL
NORTHERN DIVISION
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June 30, 2000

MEMORANDUM

SUBJECT: Report No. 2000-P-000018
            EPA's Multimedia Enforcement Program

FROM: Charles Allberry /s/
            Audit Manager
            Northern Division

TO: Steven A. Herman
            Assistant Administrator for Enforcement
              and Compliance Assurance

This report concludes our review of EPA's multimedia enforcement program. The report
describes problems that the Office of Inspector General (OIG) has identified and corrective
actions that the Office of Enforcement and Compliance Assurance (OECA) has initiated, or plans
to initiate. The audit report represents the opinion of the OIG. Final determinations on matters in
this audit report will be made by the EPA managers in accordance with established EPA audit
resolution procedures.

ACTION REQUIRED

In responding to the draft report and during the exit conference, your office provided corrective
actions, with milestone dates, for each recommendation. Therefore, no further response is
required, and we are closing this report in our tracking system. Please track all corrective actions
in the Management Audit Tracking System (MATS). Corrective actions provided at the exit
conference are included at the end of each chapter, and should be tracked in MATS.

We have no objections to the further release of this report to the public.

If you have any questions, please call Janet Kasper, Team Leader, (312) 886-3059 or Ernie
Ragland, Audit Liaison, (202) 260-8984.

EXECUTIVE SUMMARY

**PURPOSE AND
OBJECTIVE**

During discussions regarding future Office of Inspector General (OIG) audits of the Environmental Protection Agency's (EPA) enforcement program, Office of Enforcement and Compliance Assurance (OECA) officials expressed a concern that EPA was not taking a multimedia approach to enforcement in areas where it would be most beneficial. They believed that multimedia enforcement would allow EPA to use resources more efficiently and maximize the environmental results from enforcement actions. As a result, the OIG performed an audit to answer the question: "What progress has EPA made in implementing multimedia as a tool for achieving compliance with laws and regulations?"

RESULTS IN BRIEF

Multimedia enforcement actions can result in significant environmental benefits. Examples of three multimedia cases EPA settled in fiscal year (FY) 1999 are Ashland Oil, Puerto Rico Electric Power Authority, and Boston Department of Transportation.

- In October 1998, EPA settled with Ashland, Inc., resolving multimedia violations at three petroleum refineries. The settlement resulted in $5.8 million in penalties, company expenditures of $12 million to correct the violations, and $14.9 million for supplemental environmental projects (SEPs). The enforcement action resulted in reductions in numerous pollutants, as listed in exhibit 1.

- In June 1999, EPA settled with Puerto Rico Electric Power Authority to bring all of its plants into compliance with all environmental statutes. The settlement resulted in $1.5 million in penalties, $4.5 million in SEPs, and the Power Authority spending over $200 million to comply with the agreement.

- In January 1999, EPA settled with Boston Transportation Department for violations of the Clean Air Act and Clean Water Act. The settlement resulted in $28,650 in penalties and the city spending about $200,000 to comply with the

i

agreement. The settlement resulted in a reduction of 470 pounds of volatile organic compounds per year.

OECA Can Do More to Promote Multimedia Enforcement

While OECA had encouraged use of multimedia as an enforcement tool, it had not developed a comprehensive multimedia program. OECA had not (a) established a plan to implement and manage the multimedia program, (b) clearly communicated its philosophy regarding the role of multimedia enforcement to EPA managers and staff, or (c) issued policies on how or when to use the multimedia approach as an enforcement tool. This condition occurred because OECA management decided to focus resources on developing national expertise in multimedia enforcement and sharing that knowledge with regions. The lack of policies resulted in variations in the effectiveness of regional approaches to multimedia enforcement. Without a plan, EPA was not accountable for making progress in implementing the program.

OECA Needed to Evaluate the Effectiveness of Multimedia Enforcement

OECA had not evaluated the effectiveness of multimedia enforcement as a tool for ensuring compliance with laws and regulations. OECA did not (a) have accurate information on the number of actions, (b) always measure the benefits of actions taken, or (c) know the cost of the actions taken. As a result, OECA did not know whether the multimedia approach was an effective or efficient tool for reducing noncompliance and improving the environment and human health.

Impact of EPA Progress

EPA management believed that a multimedia approach to enforcement would be a more efficient use of resources and maximize environmental results. However, EPA will not likely achieve the full benefits of a multimedia approach without a comprehensive plan for implementing multimedia enforcement throughout EPA, and a way to evaluate results. In 1994 and 1995, EPA reorganized enforcement functions in order to, among other things, remove organizational impediments to multimedia enforcement. Five years later, organizational and other types of impediments to a comprehensive multimedia enforcement program continued.

**DRAFT REPORT
RECOMMENDATIONS** We recommend that the Assistant Administrator for OECA:

- Develop a plan to implement and manage the multimedia enforcement program.

- Clarify what types of actions meet the definition of multimedia enforcement and track the actions in the Enforcement Docket Computer System.

- Establish an action plan for implementing the recommendations to improve the completeness and accuracy of information on benefits from multimedia enforcement actions.

- Work with the Office of the Chief Financial Officer to develop a process to identify and track costs of multimedia enforcement actions.

A full list of the recommendations is included at the end of chapters 2 and 3.

**AGENCY COMMENTS
AND ACTIONS** In responding to the draft report, the Assistant Administrator (AA) for Enforcement and Compliance Assurance stated the OECA had been a national leader in promoting multimedia enforcement since 1994, but agreed that more could be done to promote it. OECA actions to promote multimedia enforcement include (a) national enforcement guidance to regions that identified multimedia priority sectors, (b) efforts to remedy significant violations by large corporations, (c) guidance documents that cover more than one media, and (d) a standing committee on multimedia enforcement.

The AA agreed to take action to collect the information needed to more thoroughly evaluate program effectiveness. Between 1995 and 1998, OECA evaluated regional multimedia programs, but, because of its lack of experience with multimedia enforcement, was limited in its ability to set a standard for what constituted an effective use of multimedia enforcement.

The AA agreed to take the following actions:

- Use the audit report as an impetus to reiterate OECA's management philosophy, the objectives of multimedia enforcement, definition of multimedia, and additional steps necessary to implement multimedia enforcement.

- Work with regions to implement multimedia enforcement through OECA management visits, the multimedia enforcement standing committee, monthly conference calls with the regional enforcement coordinators, and policies on multimedia enforcement.

- Review and communicate the definition of multimedia enforcement and ensure that definitions are consistent.

- Implement recommendations in an OECA study to improve the collection of information on benefits from enforcement actions.

- Submit a proposal to the Office of the Chief Financial Officer to establish a workgroup to develop recommendations for including information on all types of enforcement actions into the Agency's accounting system.

The Agency's comments and actions are also summarized at the end of chapters 2 and 3, and included in appendix 1.

OIG EVALUATION

The OIG concurs with the actions of the AA to improve program implementation and evaluation. The Agency's actions, when implemented, will address the findings and recommendations in the report.

Table of Contents

APPENDICES

ABBREVIATIONS AND
DEFINITION OF TERMS

CERCLA   Comprehensive Environmental Response, Compensation, and Liability Act

DOCKET   Enforcement Docket Computer System

EPA   Environmental Protection Agency

EPCRA   Emergency Planning and Community Right-to-Know Act

FY   Fiscal Year

GPRA   Government Performance and Results Act

MED   Multimedia Enforcement Division

Objectives Ends toward which activities are directed; goal.

OECA   Office of Enforcement and Compliance Assurance

OIG   Office of Inspector General

Philosophy A system of fundamental or motivating principles; basis for action or belief. For example, management's philosophy, or reason why it believes, that a multimedia approach to enforcement would be more effective.

Policy   Guideline for action.

Procedures A set of established forms or methods for carrying out activities.

SEP   Supplemental Environmental Project

Strategy   Plan of action that directs activities toward the achievement of goals.

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CHAPTER 1
Introduction

**PURPOSE AND
OBJECTIVE**

During discussions regarding future Office of Inspector General (OIG) audits of the Environmental Protection Agency's (EPA) enforcement program, officials expressed a concern that EPA was not taking a multimedia approach to enforcement in areas where it would be most beneficial.[1] They believed that multimedia enforcement would allow EPA to use resources more efficiently and maximize the environmental results from enforcement actions. As a result, the OIG performed an audit to answer the question: "What progress has EPA made in implementing multimedia as a tool for achieving compliance with laws and regulations?"

BACKGROUND

The accomplishment of EPA's goals depends upon a strong enforcement and compliance assurance program. Many of America's environmental improvements over the last 25 years are attributable to a strong set of environmental laws. The goal of EPA's enforcement program is to ensure full compliance with the laws intended to protect human health and the environment.

Enforcement actions can be either administrative or judicial, and can include both civil and criminal remedies. Most enforcement actions (a) inform the entity of the violation, (b) require the entity to achieve and maintain compliance with the violated requirement, (c) require the entity to correct the environmental damage attributable to the violation within a set period of time, and/or (d) except for certain responses to self-audits, impose sanctions for noncompliance, including recovery of any economic benefits gained through the noncompliance.

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[1]Throughout the report, we refer to enforcement. The Office of Enforcement and Compliance Assurance (OECA) has defined enforcement to include activities from inspection through when a facility returns to compliance.

What is Multimedia Enforcement?

EPA identifies a wide variety of actions as multimedia.[2] At a minimum, multimedia enforcement actions involve more than one media (air, water, or land) or more than one law (Clean Air Act, Clean Water Act, etc.). For example, a multimedia enforcement action occurs when EPA reviews air and water issues during one inspection, or when violations of the Resource Conservation and Recovery Act and Safe Drinking Water Act are combined into one administrative order. Multimedia enforcement actions can also be comprehensive reviews of all applicable laws at one facility and taking one enforcement action to resolve all violations.

History of Multimedia Enforcement

In 1991, the Administrator established a goal of 25 percent enforcement with multimedia elements as part of the overall integrated direction in which he was trying to move the Agency. The multimedia approach was intended to further several objectives: (a) greater environmental protection, risk reduction and pollution prevention, (b) greater deterrence, and (c) greater resource efficiency than single program/single media approaches can accomplish alone. The multimedia approach was intended to guide, but not supplant, important on-going implementation of single media enforcement programs and the targeting that was pursued in those programs.

In 1993, the Administrator announced the creation of OECA, replacing the Office of Enforcement and consolidating Headquarters enforcement programs. One of the principles that guided the Administrator's decision was that multimedia, whole facility approaches to enforcement represented the future of environmental protection and should be pursued whenever appropriate. The reorganization task force focused on increasing efficiencies in the single media enforcement programs. The task force also intended to remove organizational impediments to effective targeting and integrated, multimedia approaches.

The enforcement reorganization resulted in increased emphasis on multimedia enforcement at the national and regional level. Within OECA, EPA created the Multimedia Enforcement Division (MED) with the function of developing, implementing, and managing a

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[2]Consistency in EPA's identification of enforcement actions as multimedia is discussed in chapter 3.

multimedia program that emphasizes whole facility approaches to enforcement. In fiscal year (FY) 2000, MED had about 11 staff who worked primarily on multimedia enforcement. MED had additional staff who were responsible for the budget and human resources for Office of Regulatory Enforcement, and implementation of policies for penalties and supplemental environmental projects (SEP).

The Administrator required that the regions create an enforcement coordinating office or consolidated enforcement division to promote integrated, cross-program approaches to environmental protection. Regions 1, 2, 6, and 8 have enforcement divisions. The other regions have coordinating offices for enforcement.

Benefits of Multimedia Enforcement

According to EPA documents and staff, a multimedia approach to enforcement benefits the environment, regulated community, and EPA.

Environmental Benefits
- More comprehensive and reliable assessment of a facility's compliance with fewer missed violations.
- Higher probability to uncover or prevent problems before they become a risk to either public health or the environment.

Benefits to the Regulated Community
- Fits well with environmental auditing practices.
- May result in changes in corporate behavior toward environmental compliance.

Benefits to EPA
- Better use of federal enforcement resources.
- More comprehensive look at the processes that facilities use.
- Better understanding of cross-media problems and issues.

SCOPE AND METHODOLOGY

The audit was conducted from June 14, 1999, through March 15, 2000. Fieldwork was performed at OECA, and Regions 2 and 5. All other regions were requested to provide information regarding

3

their multimedia enforcement programs. The audit did not include an evaluation of state multimedia enforcement activities. Except as noted in exhibit 2, we performed our work in accordance with government audit standards. For further details on the scope and methodology, see exhibit 2.

CHAPTER 2
OECA Can Do More to Promote Multimedia Enforcement

While OECA had encouraged use of multimedia as an enforcement tool, it had not developed a comprehensive multimedia program. OECA had not (a) established a plan to implement and manage the multimedia program, (b) clearly communicated its philosophy regarding the role of multimedia enforcement to EPA managers and staff, or (c) issued policies on how or when to use the multimedia approach as an enforcement tool.[3] This condition occurred because OECA management decided to focus resources on developing national expertise in multimedia enforcement and sharing that knowledge with regions. The lack of policies resulted in variations in the effectiveness of regional approaches to multimedia enforcement. Without a plan, EPA was not accountable for making progress in implementing the program.

During the 1994 enforcement reorganization, OECA created MED to develop a multimedia enforcement program and to promote its implementation throughout the Agency. The organization and functions manual states that MED is to "develop, implement and manage EPA's multimedia enforcement program that emphasizes whole facility and/or a whole geographic or sector-based approach to enforcement." Also, according to its mission statement, MED is dedicated to... "bringing regulated industries into compliance with environmental laws by creating and promoting implementation of a comprehensive multimedia program in Headquarters and regions."

**MULTIMEDIA AS AN
ENFORCEMENT TOOL**

OECA and regions are using multimedia as an enforcement tool. OECA activities to promote multimedia enforcement include: (a) leading national cases, (b) providing inspector training, (c) assisting regions, (d) developing targeting tools, (e) organizing national conferences, and (f) establishing a national standing committee. (See table 1 for details.) Regional multimedia activities

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[3]For clarity, page vii includes definitions of the management terms, such as philosophy and policy, used in this chapter.

include: (a) conducting multimedia enforcement actions, (b) forming multimedia committees and teams, and (c) developing targeting strategies.

Table 1
Summary of OECA Activities

Activity	Description
National enforcement cases	Developed the National Enforcement Screening Strategy to identify and remedy corporate patterns of noncompliance on a multimedia basis. Led and assisted with multi-facility, multi-regional enforcement actions. Provided contractual support for case development.
Inspector training	Developed and conducted training on performing multimedia inspections.
Regional assistance	Serves as information clearinghouse for multimedia enforcement issues. Each region had a MED staff member whom they could contact for assistance with multimedia enforcement.
Targeting tools	Developed an electronic tool for regions to use in identifying facilities in noncompliance in more than one media. Developing other tools to analyze the environmental conditions and enforcement presence in a geographic area.
National conferences	Organizes conferences that focus on multimedia enforcement issues.
Standing committee on national cases	Committee of OECA and regional representatives that discuss ways for improving coordination of national cases.

In addition to promoting multimedia enforcement, OECA offices besides MED had incorporated multimedia approaches into their activities. OECA sector strategies look at all environmental issues at facilities in a specific industry sector. OECA also encouraged the use of imminent and substantial endangerment authorities on a multimedia basis.

COMPREHENSIVE MULTIMEDIA PROGRAM NEEDED

While OECA created MED more than five years ago to develop, implement, and manage the multimedia enforcement program, it did not create a comprehensive program. OECA took actions to encourage multimedia enforcement, but it did not have a plan for developing, implementing, and managing the multimedia program. OECA had not clearly communicated its philosophy regarding the role of multimedia enforcement, and had not issued policies on how or when to use it.

Planning is an important management function. Planning involves deciding in advance what is to be done, how and when it is to be done, and who is responsible. Planning also provides a basis for controlling a program. *The Public Manager's Guide* states that

> Effectiveness and efficiency in public programs are far more likely to occur when objectives are carefully thought out and prioritized, and strategies with supporting activities are delineated in advance of implementation.[4]

OECA had not clearly communicated its current philosophy, or motivating principles, for taking a multimedia approach to enforcement. In 1991, senior EPA management's philosophy was that multimedia enforcement was an Agency-wide goal and was intended to further several objectives: (a) greater environmental protection, risk reduction and pollution prevention; (b) greater deterrence; and (c) greater resource efficiency than single-media approaches. A guiding principle for the 1994 enforcement reorganization was that "multimedia, whole facility, approaches to

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[4]Donald P. Crane, William A. Jones, Jr; *The Public Manager's Guide*, The Bureau of National Affairs, Inc., Washington, DC, 1982, p. 79.

7

enforcement represent the future of environmental protection and should be pursued whenever appropriate." In contrast, in discussion regarding this audit, OECA management stated that there had been a shift in how multimedia enforcement was articulated. Multimedia is an enforcement tool, but no more important than other enforcement tools. Though management's philosophy on the importance of multimedia enforcement had changed since 1991 and 1994, OECA had not communicated the change in writing to EPA staff. OECA needs to communicate its philosophy in writing to guide the development of objectives, strategies, and activities related to multimedia enforcement.

OECA had no policies for multimedia enforcement. In contrast, OECA had policies regarding enforcement of single-media programs. Each media program had an enforcement response policy that covered issues such as what type of response is appropriate, and in what time frame they should take the response. However, the single media guidance was not applicable to multimedia violations. For example, the Hazardous Waste Civil Enforcement Response Policy allows multimedia violations to exceed standard response times. This raises the question of how quickly Headquarters and regions should take action to respond to multimedia violations. Without a policy, there are no guidelines for taking action and no basis for evaluating whether Headquarters and regions are taking timely action to address violations.

EPA's enforcement program needs policies to ensure that there is consistency among regional offices in how they use multimedia enforcement. According to OECA's operating principles[5], environmental problems with similar circumstances should elicit consistent and fair application of enforcement tools. The development of response strategies should also include consideration of statutory authorities to decide whether a single or a multimedia approach might be most effective.

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[5]Operating Principles for an Integrated Enforcement and Compliance Assurance Program, issued by OECA in 1996.

PLANNING AND POLICY NOT A PRIORITY

Until recently, OECA did not consider the planning and policy aspects of developing a multimedia program as a priority. When MED was formed in 1994, its priority was to gain experience with multimedia enforcement, share the experience with regions, and train regional staff to lead national enforcement cases. An important factor in OECA's decision was that the regional enforcement reorganizations did not take place until a year later, and so, at the time, regions did not have established multimedia offices. OECA management saw themselves as trying to implement a national program, but without the power to do so because there were not specific regional resources devoted to multimedia enforcement. Therefore, management decided to rely on convincing regions of the benefits of multimedia enforcement, rather than preparing plans and policies it believed could not be implemented. During discussions regarding this audit, OECA management agreed that it may be an appropriate time to develop a plan for implementing a comprehensive multimedia program.

With the enforcement reorganizations in 1995, regions established either a consolidated enforcement division or an office to coordinate all enforcement activities. As a result, each region had a focal point for all enforcement activities, including multimedia. The position description specifically states that the regional enforcement coordinator (a) is a policy point of contact for OECA; (b) leads the development of the regional enforcement program, including integration of single media and multimedia activities; and (c) coordinates, tracks, and evaluates the effectiveness of multimedia enforcement activities. OECA should be using the enforcement coordinators to implement a multimedia program in the regions.

OECA'S DECISION IMPACTED IMPLEMENTATION

OECA's decision to focus on building capabilities, rather than planning and policies, had several impacts. First, it resulted in variations in the effectiveness of regional approaches to multimedia enforcement. Second, OECA and regions were not accountable for making progress toward creating and implementing a comprehensive multimedia program. Third, OECA did not realize anticipated benefits from the enforcement reorganization.

9

The following examples illustrate how regions varied in their approach to multimedia enforcement, which resulted in differing levels of effectiveness of regional programs.

- OECA did not have a policy on identifying facilities for multimedia enforcement actions. Region 6 used a detailed formula that relied upon risk screening and environmental justice evaluations using its Regional Geographic Information System. According to regional staff, in 1999, 100 percent of Region 6's multimedia inspections resulted in the identification of at least one significant violation. Most other regions relied upon EPA and state staff to identify candidates for multimedia inspections. About 55 percent of the multimedia inspections in Region 5, and 66 percent of the inspections in Region 2 resulted in at least one significant violation. Because multimedia enforcement inspections required more resources than other inspections, it was important that regions select facilities that will likely result in identifying violations.

- Because of differences in environmental regulations, Region 2 negotiates separate administrative orders for each type of violation identified during a multimedia inspection. For example, if an inspection resulted in air and water violations, Region 2 would negotiate two administrative orders. In contrast, Region 1 includes both violations in one order.

Without a written plan for creating and implementing a multimedia program, holding OECA and regions accountable for making progress toward implementing a multimedia program was difficult. A written plan would identify (a) management's philosophy, or motivating principles, for using a multimedia approach to enforcement, (b) the objective or goal of the multimedia program, and (c) a strategy for achieving the objective. The plan would serve as a basis for measuring progress.

One goal of the enforcement reorganization was to remove the organizational impediments to effective targeting and integrated, multimedia approaches. More than five years later, impediments, both real and perceived, continued to exist. Having a plan for

10

implementing the multimedia program would have increased the likelihood that they would have addressed the impediments.

CONCLUSION

Although plans do not guarantee success of a program, they do greatly enhance the probability of success. While EPA took multimedia enforcement actions, OECA did not have a plan for developing, implementing, and managing a multimedia enforcement program. Without a plan, OECA and regions were not accountable for making progress in using a multimedia approach and barriers to multimedia enforcement continued to exist. Without policies, regions varied in their approach to multimedia enforcement and the effectiveness of their programs.

DRAFT REPORT
RECOMMENDATIONS

We recommend that the Assistant Administrator for OECA:

2-1 Develop a plan to implement and manage the multimedia enforcement program. The plan needs to include:

- management's philosophy toward multimedia enforcement;
- the objective of the multimedia program;
- a definition of multimedia enforcement (see chapter 3);
- a strategy, including specific steps it will take to implement a comprehensive multimedia program; and
- identification, development, and issuance of policies on multimedia enforcement.

2-2 Use existing regional enforcement coordinators to promote and implement multimedia enforcement in the regions.

AGENCY COMMENTS
AND ACTIONS

In responding to the draft report, the Assistant Administrator (AA) for Enforcement and Compliance Assurance agreed that more could be done to promote multimedia enforcement, and stated that OECA had been a national leader in promoting multimedia since 1994.

11

- Since 1996, national enforcement guidance to the regions has included multimedia priority sectors and encouraged regions to target geographic areas for multimedia emphasis.

- In 1994, OECA began a new effort to identify and remedy significant violations by large corporations of multiple environmental statutes at multiple facilities across the country. Through this effort, EPA has begun to effect change at the corporate level that has resulted in improved compliance and environmental benefits across the country.

- OECA has developed guidance documents, such as the Supplemental Environmental Projects Policy and Small Business Policy that address more than one media. These policies provide guidance to the regions in a number of key areas that is applicable to all media, thereby eliminating one barrier to multimedia enforcement actions – conflicting single media policies.

- OECA established a standing committee on multimedia enforcement that is developing a draft model case management plan for large complex enforcement actions.

To address the first recommendation, the Assistant Administrator stated that he intends to use the report as an impetus to reiterate OECA's management philosophy, the objectives of multimedia enforcement, definition of multimedia, and to identify any additional steps, including new policies, necessary to implement multimedia enforcement. A memorandum will be issued within 90 days of the final OIG report that addresses this recommendation.

To address the second recommendation, OECA intends to continue to use existing mechanisms to promote and implement multimedia enforcement in the regions. The mechanisms include (a) OECA management frequently visiting regions to review performance and address policy issues and (b) the multimedia enforcement standing committee. At the exit conference, Multimedia Enforcement Division managers added that they would be using two other mechanisms for promoting multimedia enforcement with the regions: (a) issuing policies on multimedia enforcement where

12

needed and (b) discussing multimedia enforcement during monthly conference calls with the regional enforcement coordinators.

OIG EVALUATION

We agree that OECA had taken action to implement multimedia activities. However, without a plan, the likelihood of the activities resulting in a comprehensive multimedia program decreased.

The cross media nature of OECA policies on supplemental environmental policies and audits do eliminate conflicting single media policies, which are a barrier to multimedia enforcement. What these policies do not provide is guidance on taking whole facility approaches to multimedia enforcement. Without guidelines, OECA did not have a basis for evaluating the effectiveness of the multimedia approach or determining whether similar environmental problems were eliciting similar approaches.

OECA actions to develop a plan to implement and manage the multimedia program, when implemented, will address the first recommendation.

To address the second recommendation on implementing multimedia in the regions, OECA identified a number of actions it is taking, or plans to take, that we agree will increase its efforts to work with regions in developing their multimedia enforcement programs.

13

CHAPTER 3
OECA Needed to Evaluate the
Effectiveness of Multimedia Enforcement

OECA had not evaluated the effectiveness of multimedia enforcement as a tool for ensuring compliance with laws and regulations. OECA did not (a) have accurate information on number of actions, (b) always measure the benefits of actions taken, or (c) know the cost of the actions taken. As a result, OECA did not know whether the multimedia approach was an effective or efficient tool for reducing noncompliance and improving the environment and human health.

EPA had stated that the multimedia approach offers the potential for greater environmental protection, deterrence, and resource efficiency. However, OECA did not have complete information on the numbers, benefits, and costs to decide whether the multimedia enforcement program was achieving the potential benefits. OECA did not have complete information because:

- OECA had not established a consistent definition of multimedia enforcement,

- EPA staff did not understand how to measure benefits of multimedia enforcement actions, and some benefits are not quantifiable; and

- EPA's accounting system did not segregate the costs of taking multimedia enforcement actions.

ACTIONS NOT ACCURATELY IDENTIFIED

OECA did not have accurate information on the number of multimedia enforcement actions because it did not have a consistent definition of what represents a multimedia enforcement action. The Enforcement Docket Computer System (DOCKET) tracked inspections, complaints, settlements, and SEPs that affected more than one media as multimedia enforcement actions. MED considered a multimedia enforcement action to be a comprehensive review of all applicable environmental laws at a facility, but did not

14

track the number of actions that met its definition. Without a consistent definition, OECA did not have accurate information on where EPA took multimedia enforcement actions in order to evaluate the effectiveness of the multimedia approach.

Regions report information on multimedia enforcement actions through DOCKET. However, the value of the information was diminished because there was not a consistent definition for multimedia enforcement. OECA had two definitions for multimedia enforcement: one for identifying multimedia actions in DOCKET and a second that MED used.

- In DOCKET, regions can identify actions as multimedia if the inspection, complaint, settlement, or SEP affects more than one program.

- MED defines a multimedia program as one that is designed to foster a comprehensive approach to the resolution of environmental problems. Comprehensive is defined as meaning that the programs look at applicable provisions of all environmental laws.

The DOCKET data dictionary definition of multimedia enforcement allows regions to identify more actions as multimedia than what EPA intended. Agency documents issued during the 1994 enforcement reorganization indicated that the multimedia program was to emphasize whole facility approaches. Using the DOCKET definition, regions can identify an incident that affected only one media as multimedia. If a facility fails to report a hazardous spill to the National Response Center and to state and local officials, it is a violation of two statutes, the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the Emergency Planning and Community Right-to-Know Act (EPCRA). In DOCKET, regions can identify violations of two statutes as multimedia enforcement actions, regardless of the actual impact. In a sample of 13 cases identified in DOCKET as multimedia, two were failures to report violations of CERCLA and EPCRA.

MED's definition more closely matches what EPA intended. The definition emphasizes enforcement actions that look at all applicable

15

provisions of all environmental laws, which would be consistent with the idea of a whole facility approach. MED could clarify its definition by including examples of what types of enforcement actions would be considered multimedia. OECA also needs to revise the DOCKET definition so that it is consistent with the MED definition to accurately track information on multimedia enforcement actions.

BENEFITS NOT ALWAYS MEASURED

EPA staff did not always measure the benefits obtained from multimedia enforcement actions. This occurred because (a) EPA staff did not understand how to perform the calculations or estimates, and (b) some benefits, such as changes in the environment, are difficult to associate with specific enforcement actions. Without information on the benefits of actions taken, EPA cannot evaluate the effectiveness of the multimedia approach to enforcement.

OECA collects information on the benefits of enforcement action through DOCKET. The types of information related to benefits of enforcement actions collected through DOCKET include:

- penalties assessed,
- type and cost of supplemental environmental projects,
- pollutants reduced or eliminated,
- actions taken to return to compliance or to meet the requirements of the enforcement action, including the cost of the actions, and
- qualitative impacts, such as human health protection and ecosystem protection.

EPA staff did not routinely report information on pollution expenditures and reductions from multimedia enforcement actions. In a sample of ten multimedia cases completed in FY 1999, information on the penalty and cost of the supplemental environmental project was available for all cases. EPA staff reported information on reductions in specific pollutants in six of ten cases. In two additional cases, qualitative benefits, such as improvements to human health were reported, but could not be quantified.

A 1999 OECA study on the completeness of DOCKET found that EPA staff reported pollution reduction benefits for 68 percent of the enforcement cases concluded in FY 1998, for which pollution reduction could be reported. The study found that the staff did not always understand how to perform the calculations and estimates that they needed to measure pollution reduction benefits. OECA also found that there was an emphasis on collecting data to prove a violation, which may not be sufficient to estimate the benefits of the enforcement action. The study recommended that OECA develop a guidance package that includes the purpose and intended use of the benefit information, comprehensive and updated definitions of the data fields, and program specific estimating scenarios. The study also recommended that OECA take steps to ensure consistency and technical quality of pollution reduction estimates. At the time of the audit, OECA was working on an action plan for implementing the recommendations.

Some benefits from multimedia enforcement actions cannot be associated with specific enforcement actions. Improvements to human health and the environment that result from an enforcement action may be difficult to predict or place a dollar value on. Because multimedia enforcement actions may focus on compliance with all environmental laws, the action may result in changes to corporate behavior that EPA cannot quantify. Since they can quantify many benefits, EPA needs to emphasize routinely measuring those benefits, while recognizing there are other benefits that are not quantifiable.

COST OF ACTIONS NOT COMPUTED

OECA did not know how much it costs to take multimedia enforcement actions. EPA did not design the accounting system to identify costs of multimedia enforcement actions. Without cost information, OECA could not evaluate whether a multimedia approach was more efficient than other approaches to enforcement.

EPA designed its cost accounting system to track costs based on Government Performance and Results Act (GPRA) structure. Multimedia enforcement is part of goal 9, objective 1, "Enforcement Tools to Reduce Noncompliance." This objective includes costs associated with all enforcement actions, except

Superfund. Costs of multimedia enforcement actions are not separately identified.

Some EPA offices and programs do track the cost of activities. For example, the National Enforcement and Investigation Center (NEIC), which is part of OECA, tracks the labor hours associated with inspections they perform, including inspections that support multimedia enforcement actions. NEIC management used the information to evaluate how much time they devoted to specific projects. The Superfund program also tracks costs associated with specific cleanups in order to recover the costs from responsible parties.

Designing the cost accounting system to track costs associated with goals and objectives can simplify preparation of the budget and annual report. While these are highly visible uses of cost accounting information, cost information can have a more profound impact on the day-to-day operations of an Agency. The Chief Financial Officers Council, in its report "Integrating the Budget Structure, Financial Statements, and Performance Measures Into One Understandable Package," identified the several important uses for cost information.

- **Improved Agency Decision Making**. Ongoing information relating to the costs of producing services should allow managers to make informed program decisions and necessary adjustments during the year.

- **Linkage to Group Performance.** Good cost accounting systems will provide information on how an individual program or regional office is performing compared with the plan or other programs or regions. This information should help efforts to benchmark program costs and help identify best practices.

- **Performance Measurement.** Most efficiency and effectiveness measures that relate outputs to resources consumed to produce the outputs will require cost information.

18

**EVALUATION OF
EFFECTIVENESS
NEEDED**

All managers need evaluative information to make decisions on the programs they oversee: information that tells them whether, and in what ways, a program is working well or poorly, and why. OECA did not have complete information on the number of multimedia actions taken, and the costs and benefits of those actions. As a result, OECA could not perform an evaluation of the multimedia approach to enforcement to decide whether it offered greater environmental protection, deterrence, and resource efficiency.

**DRAFT REPORT
RECOMMENDATIONS**

We recommend that the Assistant Administrator for OECA:

3-1 Clarify what types of actions meet MED's definition of multimedia enforcement.

3-2 Revise the DOCKET definition for multimedia to match MED's definition.

3-3 Establish an action plan for implementing the recommendations from the study on DOCKET.

3-4 Work with the Office of the Chief Financial Officer to develop a process to identify and track costs of multimedia enforcement actions.

**AGENCY COMMENTS
AND ACTIONS**

The Assistant Administrator (AA) for Enforcement and Compliance Assurance agreed to implement the recommendations, and stated that OECA had taken some action in the past to evaluate the effectiveness of regional multimedia enforcement programs. From 1995 to 1998, OECA evaluations of regional performance included an evaluation of multimedia enforcement. The reviews were both quantitative and qualitative, but due to a lack of experience with multimedia enforcement, OECA was not able to set a standard for what constituted an effective use of multimedia enforcement.

Regarding the tracking of costs to evaluate the effectiveness of multimedia enforcement, OECA stated that it supports the idea of changing the cost accounting so that it tracks activities, but OECA

19

does not believe that it would be useful for the multimedia program to track costs, if single media enforcement program costs are not tracked. Unless all costs are tracked, the Agency would lack the information needed to determine cost effectiveness.

OECA, in the written response to the draft report, agreed to take, or is taking, the following actions to address the recommendations:

- Review the definition of multimedia enforcement, make any needed adjustments, and communicate it to the regions. (Completion date - 4th quarter of FY 2000)

- OECA will ensure that DOCKET's definition and MED's definition of multimedia are consistent. Implementation of any changes to the DOCKET definition will occur as part of OECA's GEMS modernization project. (Implementation to begin 1st quarter FY 2001.)

- OECA is already implementing recommendations from the DOCKET study. A revised case conclusion data sheet and definitions have been developed and transmitted to the Regions on April 10, 2000. The eventual product will be a comprehensive revised case conclusion data guidance and training on calculating pollution reductions and other environmental benefits. (Target completion date: 1st quarter FY 2001.)

OECA management provided additional information regarding the actions it plans to take to track the costs of enforcement actions. On June 22, 2000, OECA submitted a proposal to the Office of the Chief Financial Officer recommending a workgroup be established to develop recommendations for including information on all types of enforcement actions in the Agency's accounting system. OECA management expects that the recommendations will result in a pilot project and full implementation in FY 2002.

OIG EVALUATION

The corrective actions, when completed, will address the issues and recommendations in this finding. Regarding the regional reviews, as OECA stated its ability to set a standard to evaluate regional multimedia programs in the past has been limited. Implementation of the recommendations in this report should result in a basis for evaluating the programs in the future.

Exhibit 1
Page 1 of 1

Environmental Benefits of Multimedia Enforcement

Table 2
Pollution Reduction from Ashland Oil Multimedia Settlement

Pollutant	Reduction
Volatile Organic Compounds	5,011,450 pounds per year released to the air
Sulfur Dioxide	218,000 pounds per year released to the air
Hydrogen Sulfide	5,750 pounds per year released to the air
Benzene	30 megagrams per year released to the air
Total suspended particles	not quantifiable
Ammonia	97,650 pounds per year released to water
Phenol	950 pounds per year released to water
Oil and grease	11,700 pounds per year released to water
Biochemical oxygen demand and chemical oxygen demand	153,400 pounds per year released to water
Petrol seeps	7.6 billion pounds per year released to the Mississippi River
Toxic wastewater	4.065 billion pounds per year released to the Mississippi River

Scope, Methodology and Prior Audit Coverage

SCOPE AND
METHODOLOGY

Government auditing standards require auditors to be free from personal impairments and independent of the organization being audited. One of the staff for this audit was on detail to the OIG, and had previously been a member of the Enforcement and Compliance Assurance Team in Region 5. To maintain independence, the auditor did not participate in the fieldwork performed in Region 5.

To evaluate EPA's progress in using multimedia enforcement as a tool for achieving compliance with laws and regulations, we performed the following activities.

- Evaluated the management controls relating to multimedia enforcement. Weaknesses in the management controls are discussed in chapters 2 and 3.

- Interviewed OECA staff regarding the development, implementation, and management of the multimedia program.

- Reviewed Agency documents regarding multimedia enforcement.

- Met with Region 2 and 5 staff to gain an understanding of how they approached multimedia enforcement. We also reviewed a sample of current multimedia enforcement actions for the two regions to understand the multimedia enforcement process.

- Obtained information from each region regarding how they approached multimedia enforcement, and the benefits and problems associated with it.

- Reviewed a random sample of ten multimedia enforcement actions completed in FY 1999 to evaluate the benefits of multimedia enforcement.

In conducting the audit, we relied upon information from DOCKET to identify multimedia enforcement actions. We did not conduct a data validation review of DOCKET. This will be the subject of an OIG review during FY 2000/2001.

We issued the draft report on March 28, 2000. The Assistant Administrator for Enforcement and Compliance Assurance responded to the draft report on May 16, 2000. We incorporated the response into the report, and made other appropriate changes. A complete copy of the response is included in appendix 1.

An exit conference was held with OECA Multimedia Enforcement Division management on June 19, 2000. At the meeting, management provided further explanation of the actions it would take to address the report recommendations. These actions were included as part of the Agency comments sections of the report, and were integral in our decision that no further response was needed.

PRIOR AUDIT
COVERAGE

No prior audits have been performed of multimedia enforcement. The OIG conducted a survey of Federal Facilities Enforcement and Compliance (Report No.1999-P-209), that included a multimedia approach to Federal facilities. The report suggested that the Director, Federal Facilities Enforcement Office, evaluate Region 6's risk initiative as a possible method to prioritize compliance and enforcement activities. Our audit of multimedia enforcement also found that this initiative resulted in 100 percent of Region 6's multimedia inspections in FY 1999 identifying at least one significant violation, as described on page 10.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

MAY 16 2000

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: Response to Draft Report No. 99-001076 "EPA's Multimedia Enforcement
            Program"

FROM: Steven A. Herman
            Assistant Administrator

TO: Nikki L. Tinsley
            Inspector General

In accordance with EPA Order 2750, I am responding to the Office of the Inspector General's (OIG) draft report of findings and recommendations concerning EPA's multimedia enforcement program. We appreciate the insights the report provides in answering the question: "What progress has EPA made in implementing multimedia as a tool for achieving compliance with laws and regulations?" and agree with your findings that multimedia enforcement actions are being taken and can result in significant environmental benefits. While the Agency has made great progress in making multimedia enforcement an integral part of our enforcement program, we agree with the OIG's findings that we can do more to promote and to evaluate the effectiveness of multimedia enforcement. With a few exceptions that are noted below, we agree with the recommendations set forth in the report and have included an action plan for implementing those recommendations. In many instances, this plan reflects activities underway, some of which are nearing completion.

Enforcement and Compliance Assurance Program Can Do More to Promote Multimedia Enforcement

While we agree that OECA can do more to promote multimedia enforcement, we believe that OECA has been a national leader in promoting a multimedia approach to remedying environmental problems since its inception in 1994. Multimedia enforcement has been incorporated into our planning by including it in our Memorandum of Agreement (MOA) Guidance since FY 1996. The OECA MOA guidance articulates OECA's national enforcement and compliance goals, objectives, and priorities which the regions, states, and other partners use in planning their annual activities. Without fail, each two-year MOA Guidance has included multimedia priority sectors and has encouraged the regions to target geographic areas for

The original was signed by Sylvia K. Lowrance for Steven A. Herman.

multimedia emphasis. For example, in the FY 2000/2001 MOA Guidance, two of the seven national priorities are multimedia sectors. To address sectors, we have developed integrated strategies that provide a comprehensive review of environmental issues at the facilities in the sector.

After the enforcement reorganization, OECA (lead by the Multimedia Enforcement Division (MED)) began a new effort to identify and remedy significant violations by large corporations of multiple environmental statutes at multiple facilities across the country. Historically, EPA and the states had primarily used a single-facility and single program approach to evaluate compliance and initiate enforcement actions. This traditional approach meant that examination of a large corporation's compliance with environmental requirements on a national, multimedia, and multi-facility basis generally did not occur. Over the past couple of years, this new effort has resulted in investigations and national enforcement actions. Through this innovative approach to enforcement, EPA has begun to effect change at a corporate level that has resulted in improved compliance and environmental benefits across all of a company's facilities (as the OIG highlighted in Exhibit 1 of the report). This change in direction to the EPA's traditional enforcement emphasis will be reflected in any guidance we issue on multimedia enforcement.

OECA has developed a number of guidance documents that are multimedia in nature. For example, the Supplemental Environmental Projects (SEP) Policy, Audit Policy, Small Business Policy, Small Communities Policy, and the OECA Cookbook on Imminent and Substantial Endangerment. These policies provide guidance to the regions in a number of key areas that is applicable to all media thereby eliminating one barrier to multimedia enforcement actions – conflicting single media policies. In addition, some of these documents provide the tools to facilitate multimedia enforcement. For example, the Cookbook gives Regions guidance on the imminent and substantial endangerment provisions of all environmental statutes. This compilation gives regions the information they need to be able to select the most advantageous statutory provision to use in any type of enforcement action (e.g., the RCRA imminent and substantial endangerment provision may be appropriate in a particular CWA case).

Finally, EPA senior managers for the enforcement and compliance assurance program established a standing committee on multimedia enforcement last summer. This committee, comprised of regional and headquarters managers is currently leading guidance development for managing multimedia enforcement cases. One of their first tasks was to develop language for the 2000/2001 MOA, so that each region would have similar multimedia commitments. As of this date, the committee is circulating a draft model case management plan for large complex enforcement actions.

This section of the report incorrectly states that OECA failed to address the 1991 EPA study on implementing multimedia enforcement which recommended that the Agency resolve conflicts in the administrative procedures programs used for enforcement to facilitate taking combined administrative actions. OECA addressed this issue in its revision of the Consolidated Rules of Practice ("CROP"). The final rule (64 Fed. Reg. 4176, July 23, 1999) eliminated from

2

the CROP all significant obstacles to multimedia administrative enforcement actions; one such change was to make the time allowed to file an answer to a complaint consistent with all statutes.[6]

OECA Needed to Evaluate the Effectiveness of Multimedia Enforcement

        The draft report states that "OECA had not evaluated the effectiveness of multimedia enforcement as a tool for ensuring compliance with laws and regulations." While perhaps more evaluation is needed, we do not agree that OECA did not evaluate multimedia effectiveness. Over the period FY 1995-1998, OECA conducted evaluations of each Region's enforcement, compliance, and site remediation program. The Regions' approach to multimedia screening, inspections, and enforcement was a subject of discussion in our review of each Region and a section on multimedia enforcement was included in the report written for each Regional evaluation. Our inquiry was both quantitative and qualitative, though we did not attempt through these reviews to define just what constituted a multimedia enforcement action because as reflected in the report, we were focusing on building capacity for multimedia enforcement. Early on, due to a lack of experience with multimedia enforcement, we were limited in our ability to set a standard for what constituted an effective use of multimedia enforcement. These reports will be made available to the OIG upon request.

        On page 15 of the draft report, you have stated that "... EPA staff reported pollution reduction benefits for only 27% of all enforcement cases concluded in FY 1998." This statement may be misleading if you do not consider the context of pollutant loading reductions against the expected outcomes of judicial and administrative actions. Most enforcement cases concluded in 1998, like other years, do not directly result in pollution reductions. Of the cases concluded in 1998, 40% were for penalty only; another 20% of the cases were for labeling or reporting violations. Neither of these types of cases produce direct pollution reductions, so no such reporting of pollution reduction benefit is expected. That leaves 40% of the 1998 concluded cases for which reporting on pollution reduction benefits was appropriate. Of this set of enforcement cases (for which a pollution reduction benefit was appropriate) a pollution reduction benefit was cited 67.5% of the time.[7]

        Attached please find OECA's responses to the IG's specific recommendations in the Report. For each recommendation, we have provided a response regarding our corrective action(s) and, where applicable, at time frame for completion of these corrective actions.

        Should you have any questions regarding our response, please contact Greg Marion, OECA's OIG Audit Liaison, at (202) 564-2446.

Attachment

3

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[6] This section was deleted from the final report.

[7] The final report was revised based on Agency comments.

cc: Charles Allberry
        Sylvia Lowrance
        Eric Schaeffer
        Michael Stahl
        Dennis DeVoe
        David Nielsen
        Frederick Stiehl
        Greg Marion
        Regional Enforcement Coordinators

4

EPA's Multimedia Enforcement Program
Draft Report No. 99-001076

OIG Recommendations and EPA Response

OECA Can Do More to Promote Multimedia Enforcement

We recommend that the Assistant Administrator for OECA:

- **Develop a plan to implement and manage the multimedia enforcement program.**

  OECA intends to use the final IG report as an impetus to reiterate OECA's management philosophy, the objectives of multimedia enforcement, definition of multimedia, and to identify any additional steps, including new policies, necessary to implement multimedia enforcement. A memo will be issued within 90 days of the final IG report that addresses this recommendation. *Target completion date: 4th Q FY 00 (within 90 days of final report).*

  OECA intends to issue a number of Policies applicable to all media which will facilitate multimedia enforcement.

    - SEP Policy on Profitability of Pollution Prevention Projects. *Target completion date: 4th Q FY 00.*

    - SEP Policy on Environmental Management Systems. *Target completion date: 4th Q FY 00.*

    - Multimedia Administrative Case Guidance. *Target completion date: 1st Q FY 01.*

- **Use existing regional enforcement coordinators to promote and implement multimedia enforcement in the regions.**

  OECA intends to continue to use existing mechanisms to promote and implement multimedia enforcement in the regions. These mechanisms include:

    - Frequent visits by the Assistant Administrator, Deputy Assistant Administrator, and other program managers to each region to review performance, address major policy issues, and identify need for assistance.

    - Multimedia enforcement standing committee comprised of senior managers for the enforcement and compliance assurance program

  Target completion date: Ongoing

OECA Needed to Evaluate the Effectiveness of Multimedia Enforcement

We recommend that the Assistant Administrator for OECA:

- **Clarify what types of actions meet MED's definition of multimedia enforcement.**

  OECA will review MED's definition of multimedia, make any needed adjustments and communicate it to the regions. *Completion date: 4th Q FY 00.*

- **Revise the DOCKET definition for multimedia to match MED's definition.**

  OECA will ensure that DOCKET's definition and MED's definition of multimedia are consistent. Implementation of any changes to the DOCKET definition will occur as part of OECA's GEMS modernization project. *Implementation to begin 1st Q FY 01.*

- **Establish an action plan for implementing the recommendations from the study on DOCKET.**

  In FY99 OECA conducted a thorough review of the case conclusion data and its reporting process as implemented, and adopted a set of recommendations to improve the consistency and quality of that information. OECA is already implementing the recommendations from the study on DOCKET. OECA is hiring contractor support for this effort; the procurement request has been submitted to EPA's contract office. EPA in-house staff work has already begun. A revised case conclusion data sheet and definitions have been developed and transmitted to the Regions on April 10, 2000. The eventual product will be a comprehensive revised case conclusion data guidance and training on calculating pollution reductions and other environmental benefits. *Target completion date: 1st Q FY 01.*

- **Work with the Office of the Chief Financial Officer to develop a process to identify and track costs of multimedia enforcement actions.**

  As the IG has pointed out, EPA's cost accounting system to track costs based on Government Performance and Results Act (GPRA) structure identifies costs associated with all (not separate media) enforcement actions, except Superfund (whose costs are tracked separately). While OECA supports the idea of changing the cost accounting so that it tracks activities, we do not believe that it would be useful for the multimedia program to track costs, if single media enforcement program costs are not tracked. Unless all costs are tracked, the Agency would lack the information needed to determine cost effectiveness. OECA will work with the Office of Chief Financial Officer to build into the Agency's cost accounting system all types of enforcement actions. *Target completion date: Ongoing*

2

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