

Public Comment Period Summary and Response to Comments

Comment Period: November 20, 2002 – March 31, 2003

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1. Introduction

ECHO, Enforcement and Compliance History Online, is a Web tool developed and maintained by the Environmental Protection Agency's Office of Enforcement and Compliance Assurance (OECA) for public use. The ECHO Web site, publicly accessible and EPA-maintained, provides users access to facility-level compliance and enforcement information for approximately 800,000 regulated facilities nationwide. The data included within ECHO have been available to the public for more than 10 years, primarily through Freedom of Information Act (FOIA) requests, but not in a searchable Web format. ECHO is an e-government initiative that provides the public with easier access to these data records on the Internet.

Prior to release of ECHO on the Internet, EPA worked with state governments to develop the content of the site, to ensure accurate data, and to pilot-test Internet access. A Joint EPA-State Enforcement and Compliance Public Access Workgroup developed the template for the type, sources, and amount of data to be included within ECHO. This workgroup, developed in partnership with the Environmental Council of the States (ECOS), made its recommendations in June 2000. EPA field-tested public access approaches to the enforcement and compliance data through the Sector Facility Indexing Project (SFIP), which shows data for a limited number of industrial sectors, as well as a four-state pilot in the Pacific Northwest. Public feedback and lessons learned from these projects contributed to the development of ECHO.

To prepare for ECHO release, EPA and the states conducted a comprehensive data review to ensure high quality information. ECHO also includes an online error notification process that allows users to alert EPA and the states to possible errors. An EPA/State data steward network works to resolve error notifications.

ECHO was released to the public on November 20, 2002, as a pilot site under a 60-day public comment period. Comments were solicited through a Federal Register notice and an Agency press release. The comment period gave interested parties, particularly those responsible for facilities included within the database, the opportunity to review ECHO's content and design. Based on stakeholder requests, the comment period was extended to March 31, 2003. During the public comment period ECHO received more than 500,000 queries, and EPA received official organization or company comments in addition to a large amount of email feedback.

ECHO allows users to find facility-level inspection, historical quarterly compliance status, enforcement action, and penalty information for the past two years. Facilities regulated under the Clean Air Act (CAA) Stationary Source Program, Clean Water Act (CWA) National Pollutant Elimination Discharge System (NPDES), and Resource Conservation and Recovery Act (RCRA) are included. ECHO reports provide a snapshot of a facility's environmental record, showing dates and types of violations, as well as the state or federal government's response. The site reflects state and federal compliance and enforcement records under these statutes that have been entered into several EPA databases.

Data included are drawn from the Air Facility System (AFS), Permit Compliance System (PCS), Resource Conservation and Recovery Act Information System (RCRAInfo), and, for federal enforcement actions, the Integrated Compliance Information System (ICIS), as well as the

Facility Registry System (FRS) and U.S. Census. EPA, state, and local environmental agencies and the facilities themselves collect and report the data that are submitted to these Agency databases.

Each database is copied monthly into EPA's Integrated Data for Enforcement Analysis (IDEA) system and made available by the ECHO Web interface to allow Internet access to integrated enforcement and compliance data. Data are updated monthly, normally around the third week of each month.

This document provides:

- an overview of the ECHO Web site's error reporting process during the four-month public comment period;
- an overview of EPA/State response to the error notifications received;
- a description of usage of the ECHO Web site;
- a summary of the public comments received during the ECHO comment period; and
- EPA's response to the comments received.

2. Error Reporting

EPA recognizes the importance of maintaining a high level of quality in its data systems, especially those systems that the agency makes publicly available. A great deal of EPA and state resources have been devoted to meeting this commitment throughout the Agency and for the ECHO pilot in particular. This section details the chronology of data quality efforts and procedures related to ECHO and summarizes both ECHO usage and error notifications received during the public comment period (November 20, 2002 - March 31, 2003).

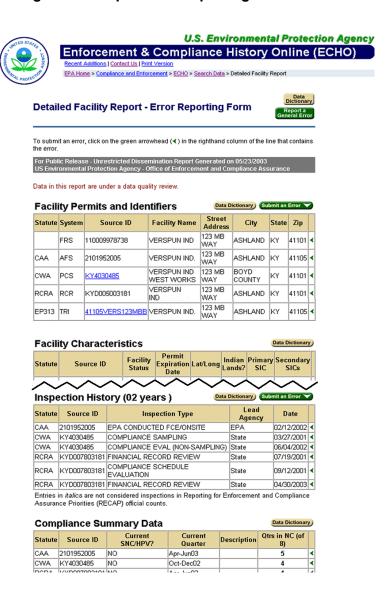
Federal, state, and local governments have been working together for many years to ensure that information in EPA's national databases are accurate. The migration of data from many jurisdictions to multiple national program databases is a challenging task. Some state and local jurisdictions directly enter data to national databases, while others maintain their own databases and transfer data to EPA through batch processing. Under both approaches, many steps are taken to ensure that the data are of high quality. For example, database managers at all levels of government work to ensure quality information through periodic analysis, conference calls, and national meetings. Pilot tests of public access to enforcement and compliance data have indicated a high level of data quality. Prior to the public launch of ECHO, EPA and the states conducted a comprehensive data review and established an EPA-State network of "data stewards" to manage, research, and correct reported errors, as appropriate.

To further ensure that data in the federal and state databases are accurate, ECHO includes an online error notification process that allows users to alert EPA and the states of possible errors. This feature is primarily designed for facilities that see errors in their data; however, members of the public can also comment if errors are suspected. Users noticing data errors on the ECHO reports can send a notification directly from the ECHO Web site. This feature allows users to comment on: facility identification information; details concerning the permit (e.g., type of permit); inspections; enforcement actions; and compliance status over the past two years.

Sections from a sample error reporting form as it would appear on a user's screen is shown in Figure 1. Notifications specific to a particular line in the report are submitted by selecting the arrow at the left of the line; general errors such as "the facility is closed" or "a permit is missing" can be submitted using the "Report a General Error" feature.

¹ EPA's Sector Facility Indexing Project (SFIP), launched in 1998, was the first project to provide compliance and enforcement data on the Internet, for a limited number of facilities.

Figure 1. Sample Error Reporting Form in ECHO



Overview of Error Reporting Process

ECHO's error reporting process involves a series of logical steps. Error notifications are first routed through the Integrated Error Correction Process (IECP), maintained by EPA's Office of Environmental Information (OEI). Error analysts assign tracking numbers to the notifications and send them to the appropriate agency for review. This review process is necessary because not all error notifications are determined to be actual data errors. Notifications may be determined to be incorrect if there is not enough evidence to support a change in the data source. ECHO's error reporting process also has been used to request more information on data elements, and less frequently, to make general comments on the ECHO Web site.

Error notifications regarding enforcement data displayed in ECHO are routed to the Office of Enforcement and Compliance Assurance's regional and state enforcement and compliance data stewards. These stewards are the responsible officials for examining and resolving notifications (i.e., determining if the notification is correct and should be accepted, or is incorrect and should be rejected). Contact information for the responsible data steward is sent to the ECHO user upon routing of his/her error notification, allowing for dialogue with the responsible agency. After review, users receive acknowledgment when their notification has been resolved, and an explanation is provided for the steward's determination. If and when error notifications are accepted as errors, stewards make the corrections in the primary data system at the state or federal level. Corrected information is then available in ECHO following the monthly update from EPA's Integrated Data for Enforcement Analysis (IDEA) system, the EPA database which feeds ECHO. When a user believes that the Integrated Error Correction Process does not yield satisfactory results for a particular notification, an appeals process is available under EPA's Information Quality Guidelines (http://www.epa.gov/oei/qualityguidelines/index.html).

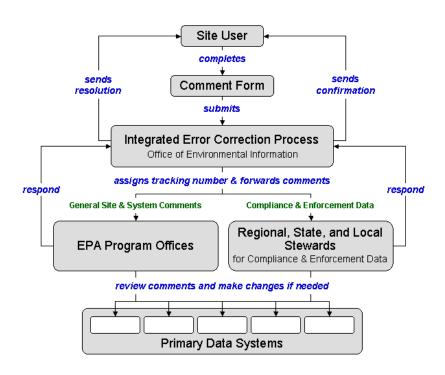


Figure 2. EPA Data Error Correction Process

The analysis of error notifications received during the comment period are presented here primarily as part of EPA's assessment of the efficacy of the error correction process. In addition, a rudimentary data quality analysis was undertaken to reveal if there were any extreme problems concerning the quality of the compliance and enforcement information being presented. While most of the analyses presented in this report are limited to the public comment period, online error notification remains a permanent feature of ECHO.

Error Notification Activity During Public Comment Period

Error Notification in Context

The level of error notification activity is based on a number of factors, including but not limited to: the number of compliance records in the data systems presented by ECHO; the number of facilities aware of the project that reviewed their data; the amount of compliance and enforcement information contained in each record; the level of precision in each record (e.g., details regarding a violation that helps a regulated entity match the ECHO display with their own records); ease of use of the online error notification process; and quality and completeness of data in state and federal source databases. Importantly, error notification statistics allow EPA and users to determine if the error notification process (part of EPA's overall Quality Management Plan) is working efficiently. The raw quantity or rate of error notifications cannot serve as a definitive measure of data quality because each notification needs to be reviewed for relevance and accuracy. Only a random audit of compliance and enforcement records can provide an accurate quantified assessment of the quality of compliance and enforcement data in the data systems. EPA recently undertook such an audit to determine the quality of inspection data in AFS, PCS, and RCRAInfo.²

The level of error notification can be put into context by juxtaposing error notification activity with ECHO site content and usage:

- ➤ A total of 824,628 facility records are presented in ECHO
- > 80,523 "larger" facility records are presented in ECHO (larger facilities have a relatively higher level of pollutant discharge than do those known as "minor" facilities and are subject to full reporting of data to EPA, and so are more likely to show compliance and enforcement activity)
- Users submitted a total of 538,715 queries during the four-month ECHO comment period
- During this time, a total of 6.915 error notifications were submitted
- These error notifications were associated with 2,508 facilities
- > 3,600 error notifications related to the compliance and enforcement information presented by ECHO (the remaining notifications were related to facility name, address, and permit linkages³, or were general comments and requests for information)
- Error notifications pertaining to compliance and enforcement information were associated with 1,159 facilities

Weekly Activity

One of the factors that impacts the level of notifications is the level of site use, measured by the number of queries, or requests for information, generated by ECHO. During the comment

²U.S. Environmental Protection Agency. 2002. <u>Results of the Random Audit of FY01 Inspection Data</u>. Office of Enforcement and Compliance Assurance.

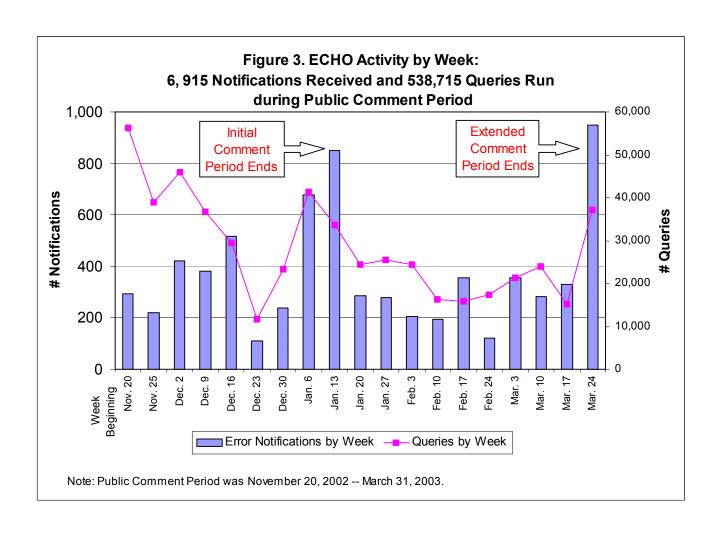
³Each facility's permits and records of regulated operations within the various federal environmental programs are linked to a common facility identifier by EPA's Facility Registry System.

period, 538,715 queries to retrieve facility records were submitted by users, in comparison to a total of 6,915 error notifications.⁴ Users often submitted more than one notification for a single facility record, thus lowering the number of facility records with suspected errors. Users that decided to use the error notification feature submitted an average of 2.8 notifications per facility record. EPA notes that during the public comment period one out of every 76 queries resulted in an error notification. In the seven weeks after the review period ended (April 1-May 12), the notification rate was 1 per every 312 queries. As noted later in this report, about half of the error notifications submitted were not related to compliance and enforcement data, but rather to basic facility name and address information. Additionally, of the compliance and enforcement data-related error notifications (3,600), 41% were not accepted by data stewards (data were not changed as a result of the notification). The enforcement and compliance data elements that received an actionable notification (actionable notification is defined as a notification that required correction by the data steward) were less than 1% of:

- the total facilities shown within ECHO (800,000+),
- the number of ECHO queries run during the review period (538,715), or
- the number of facility reports that were viewed during the comment period (223,739).

The frequency by week of both error notifications and queries are displayed in Figure 3, beginning with the site's public launch on November 20, 2002. Similar to site usage, error notification activity rose during the final weeks of the initially published public comment period and the final week of the revised public comment period, with 948 error notifications sent between March 24, 2003, and March 31, 2003. Although not shown in the graph, the number of error notifications has experienced a sharp decline following March 31st, with only 231 error notifications submitted during the entire month of April 2003 (see Table 8 in Section 6 for information).

⁴The numbers of queries and notifications include those generated through EPA's internal Online Tracking Information System (OTIS) tool. Data presented in both ECHO and OTIS derive from EPA's Integrated Data for Enforcement Analysis (IDEA) system, and queries and error notifications are thus recorded at this level.



Users Submitting Error Notifications

ECHO's error reporting process was intended primarily for regulated entities to send notice of any detected or suspected errors in their facility's data. In addition, the online notification process was used to request further details regarding the information being displayed. During the comment period, the majority of notifications were sent by staff at regulated entities. Relatively few government employees, consultants, and legal professionals used the error reporting system (overall site usage was more evenly distributed among groups). Table 1 presents user affiliations as disclosed by the user as an optional part of each error notification. Based on telephone and email contact for user support, a portion of the submissions of consultants and legal professionals were on behalf of regulated facilities.

Table 1. Users Submitting Error Notifications							
User Affiliation	% of Notifications						
Regulated Entity	78%						
State/Local Government User	4%						
Legal Professional	2%						
Consultants	2%						
EPA User	1%						
Other Government Representative	<1%						
College/University User	<1%						
Non Profit Organization User	<1%						
General Public	<1%						
No Affiliation Given	10%						
Note: Notifications were reported to EPA Correction Process.	A's Integrated Error						

Records with Error Notifications: Type of Facility

The distribution of industry sectors submitting error notifications is affected by: size of the facilities reviewing their records; number of regulatory requirements; number of regulated facilities; and the amount of compliance and enforcement information within the detailed facility reports presented in ECHO. (This assumes that most error notifications are submitted on behalf of the regulated entity or permit holder.) In addition, the level of attention devoted to review during the comment period might differ by industry sector based on their pre-existing attention to environmental issues, outreach by trade and professional associations, publicity surrounding the launch of ECHO, and other factors.

Notifications were submitted for facility records across the range of sectors whose records are presented in ECHO. Electric, gas, and sanitary services (e.g., electric utilities, natural gas distributors, and sewage treatment plants) account for one quarter of the facilities with reported error notifications on compliance and enforcement data. Facility records in the chemical manufacturing sector received the next largest percentage of compliance and enforcement notifications, followed by facilities that manufacture transportation equipment. Other manufacturing facilities account for the bulk of remaining notifications. Table 2 indicates the sectors with the highest levels of error notifications. As the number of regulated facilities may affect an industrial sector's error notification activity, the percent of all records in ECHO represented by each sector is given in the last column.

Table 2. Industry Sectors with Error Notifications							
Industry Sector	% of Notifications Received	% of Facility Records in ECHO					
Electric, Gas, and Sanitary Services	25%	6%					
Chemical Manufacturing	20%	2%					
Transportation Equipment Manufacturing	7%	1%					
Primary Metal Industries	6%	1%					
Paper Products	5%	<1%					
Petroleum and Coal Products	4%	1%					
Electronic and other Electric Equip. Mfg	4%	1%					
Stone, Clay, and Glass Products	3%	1%					
Food Manufacturing	3%	1%					
Fabricated Metal Products	3%	2%					
Lumber and Wood Products	2%	1%					
Other Industries	19%	83%					

Notes: Industry sectors above are shown according to their two-digit Standard Industrial Classification (SIC) code. Percent of notifications received is the number of facility records in each sector receiving compliance and enforcement error notifications, out of total facility records receiving compliance and enforcement notifications. Percent of facility records in ECHO as of April 28, 2003.

Records with Error Notifications: Geographic Distribution

The number of facility records is an important baseline with which to view the quantity of notifications submitted. A total of 824,628 facilities are presented in ECHO, including minor facilities for which states are in some cases not obligated to submit compliance and enforcement data to the federal data systems. The number of records presented by ECHO for each state and region varies, depending upon the number of regulated facilities, as well as regional or state data entry practices and requirements (e.g., minor air dischargers are not federally required entries, but states or regions may enter these into their data systems and thus present a larger number of facility records).

Error notifications are distributed at the regional and state level to a network of data stewards to review and resolve. State and regional distribution of notifications thus also indicates the workload for the data stewards. Workload for data stewards across the country is also reflective of the number of facilities in their geographic units.

Notifications were received on the records of facilities distributed throughout the United States. Every state and EPA regional program received notifications roughly in proportion to the number of facility records in the geographic region presented by ECHO. State and regional distribution of error notifications and total facilities represented in ECHO are displayed in Table 3. As seen in the table, EPA Region V received the greatest number of notifications. Region V also accounts for the greatest number (22%) of regulated facilities among all EPA regions. Notifications

assigned to a state include those routed to either the state or the region.

	Table 3. ECHO	Facilities and Error	Notifications, b	y State and EP	A Region					
State	Facility Records in ECHO	Error Notifications Received	State	Facility Records in ECHO	Error Notifications Received					
CT	7,955	132	AR	5,354	68					
MA	19,291	94	LA	29,532	290					
ME	2,563	57	NM	5,302	24					
NH	6,294	19	OK	9,014	64					
RI	6,200	12	TX	36,357	862					
VT	2,971	10	Region VI	85,559	1,308					
Region I	45,274	324	IA	11,753	64					
NJ	31,590	195	KS	17,880	44					
NY	56,025	345	NE	6,469	34					
PR	4,824	67	MO	21,298	20					
Region II	92,439	607	Region VII	57,400	162					
DC	1,445	6	CO	14,914	72					
DE	1,694	42	MT	2,949	33					
MD	19,916	75	ND	2,051	9					
PA	37,794	226	SD	2,167	11					
VA	15,704	203	WY	5,601	41					
WV	10,322	148	Region VIII	27,682	166					
Region III	86,875	700	AZ	7,654	97					
AL	16,548	112	CA	54,184	384					
FL	41,746	115	HI	1,531	7					
GA	15,516	134	NV	3,679	14					
KY	15,854	78	Region IX	67,048	502					
MS	8,633	64	AK	4,146	21					
NC	16,123	123	ID	3,360	28					
SC	10,398	80	OR	9,055	41					
TN	14,922	105	WA	17,813	92					
Region IV	139,740	811	Region X	34,374	182					
IL	45,905	221	<u> </u>		•					
IN	16,232	448								
MI	27,502	150	Notes: Tatel C	ooility rooseds in EC	CHO on of Armil 20					
MN	35,088	17			CHO as of April 28, are not included. Those					
WI	23,348	325	notifications th	03. Facilities in U.S. territories are not included. The diffications that could not be attributed to a particular						
Region V	177,628	1,617	facility or state	e are not included.						

Data Types Receiving Error Notifications

Of a total 6,915 error notifications submitted during the public comment period, a total of 3,315 notifications, or 48%, related to facility identification information (e.g., incorrect facility name or address), permit linkages, duplicates, industrial codes, and other data not associated with compliance or enforcement. These data (see Figure 4) are generally derived from facility submitted records (e.g., permit applications and renewals, self-submitted monthly monitoring reports). Facility identification information, unlike compliance and enforcement data, is more in the control of the facilities themselves. While six of the eight sections on an ECHO Facility Report display compliance and enforcement records, only half of the data for which users have submitted notifications relate to compliance and enforcement data (i.e., inspections, compliance status, and enforcement actions).

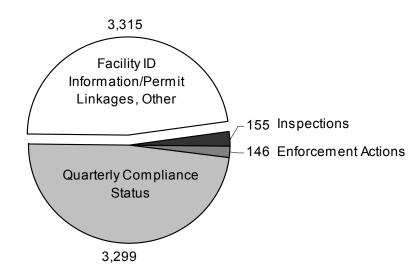


Figure 4. Error Notifications Submitted, by Data Type

Facility Identification Notifications

ECHO displays the facility name and location as they appear in the individual data systems. However, facility identification information may differ among the data systems; for example, a facility's name or address on its air permit (and in the Air Facility System) may not match its records in another data system, such as RCRAInfo. One reason for this is that the basic name, address, city, state, and ZIP code data shown within ECHO are normally reported at different times to different regulatory authorities. For example, a facility may report directly to the U.S. EPA for the Toxics Release Inventory in June, 2001, to the delegated RCRA state authority in July, 2002, and to the state air program at the time of permit issuance (for example in August 1999). EPA attempts to "link" appropriate program records together by comparing this self-reported data. However, because of the time differences in reporting, and the fact that different facility staff may report the data in an inconsistent way, there are often data discrepancies among the systems.

The pilot ECHO use indicates the multiple collection of similar facility data is cause for concern. Facilities should ensure that facility name changes are reported to the proper regulatory authorities as required under the law. This will ensure that consistent information is shown on the ECHO report. A great number of notifications sent to ECHO were the result of facilities failing to notify regulatory agencies of recent corporate name changes, or because a company preferred an alternate name or address.

Compliance and Enforcement Data

As ECHO's focus is to make available compliance and enforcement data for regulated facilities, this report looks more closely at error notifications relating to compliance and enforcement information that, if incorrect, could reflect negatively on a facility. The number of notifications submitted on compliance and enforcement data is based on factors which also affect the level of notification in general: the number of records with compliance and enforcement data presented by ECHO; the level of detail presented for each data element; quality and completeness of the underlying data; and the data element's importance to stakeholders.

The number of facilities with compliance and enforcement activity displayed in ECHO provides some context for the error notification activity. However, the rate of error notification is not in and of itself a measure of data quality. Table 4 compares the number of facilities with compliance and enforcement data, the total number of notifications, and the number of facilities receiving error notifications on compliance status (including but not limited to violations), inspections, and enforcement actions, respectively.

Table 4. Distribution of Compliance and Enforcement Error Notifications										
	Facilities in ECHO with Compliance/ Enforcement Data	Error Notifications	Facility Records Receiving Error Notifications							
Quarterly Compliance Status	53,000	3,299	1,075							
Inspections	87,400	155	104							
Enforcement Actions	14,400	146	68							

Data pertaining to a facility's compliance status over the past two years received a large proportion of notifications compared to those submitted on inspections or enforcement actions, at least in part because of the presentation of violation data in ECHO. User support phone calls and e-mailed comments suggest that regulated facility users often submitted notifications requesting more information on violations or compliance status because the ECHO display did not contain enough detail to match their facility records. The federal data systems provide limited details concerning violations, as the systems are designed to track enforcement and compliance activities. In addition, the quarterly summary of compliance status may not be

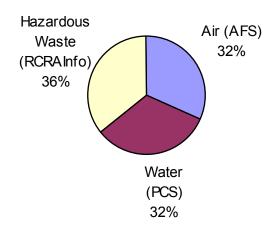
familiar to users or may not mirror the format of their records. More detailed information regarding violations is available from the regulating agency.

The importance of data elements to stakeholders (within the regulated community) also plays a role in the level of error notification activity. Historical compliance data have a more obvious bearing on a facility's reputation, and such users are likely to focus on compliance status as they review the ECHO site.

Compliance and Enforcement Notifications by Program

The number of compliance and enforcement error notifications was evenly distributed across the three main program databases presented by ECHO: AFS, PCS, and RCRAInfo. In that respect, compliance and enforcement notifications did not reflect the distribution of records within ECHO. While the error notifications were evenly distributed as shown in Figure 5, there are far more RCRAInfo records than AFS or PCS records (more than 600,000 for RCRAInfo compared to less than 130,000 for AFS and 51,000 for PCS; see the ECHO Guide to Regulated Facilities at http://www.epa.gov/echo/guide_to_regulated_facilities.html for more information). When limited to "major" facilities, there are more federally reportable AFS facility records than major NPDES permits in PCS or the larger operations regulated under RCRA (Large Quantity Generators and Treatment, Storage, and Disposal Facilities).

Figure 5. Compliance/ Enforcement Error Notifications by Program



3. EPA and State Response to Error Notifications

Of all error notifications received during ECHO's public comment period, 88% were resolved by May 3, 2003. Not all notifications can be acted upon unilaterally by the data steward. Some notifications may require further documentation (e.g., certain data systems require requests for facility name change to be submitted on company stationary or on a particular state or EPA form) or further investigation of regulatory agency records. Excluding facility identification information notifications, 85% of error notifications on compliance and enforcement data (compliance status, inspections, and enforcement actions) submitted during the public comment period were resolved as of May 3, 2003.

A total of 3,600 compliance and enforcement notifications were received during ECHO's comment period. Of these, approximately 3,060 were resolved by May 3, 2003. The average time period to resolve compliance and enforcement error notifications was 26 work days; this includes time for routing of errors to the appropriate steward, review of the information within the program database, follow-up with other stewards or the notifying user if necessary, and sending a resolution response to the user. Table 5 presents the time to resolve compliance and enforcement notifications received during the comment period. Once an update is made to the underlying database, the additional time for the change to show up in ECHO is between seven and 36 days. This lag time is dependent on the date the change is made to the system. For example if ECHO pulls the data on May 15 and posts it on May 21, a correction entered on May 14 will show up seven days later. A correction made on May 16 will not show up until June 21.

Table 5. Resolution Time for Error Notifications							
Time to Resolve	% of Resolved Compliance/Enforcement Error Notifications						
Less than 30 days	61%						
30 - 60 days	25%						
60 - 90 days	9%						
Greater than 90 days	5%						
Note: Time to resolve does not	include non-work days.						

Acceptance Rates for Error Notifications

The error reporting process, while intended for users to submit detected errors in facility reports, also was used to request more information on data displayed and to notify EPA of suspected errors. In addition, the notification may not be deemed accurate by the data steward – if so, the notification is rejected. Also, some errors of omission (e.g., ECHO indicating compliance where there is a violation) are not likely to be identified. Thus the level of notifications in itself cannot be the basis of an accurate assessment of data quality.

As of May 1, 2003, the acceptance rate for compliance and enforcement error notifications submitted during the public comment period was approximately 59%. The percent of error notifications accepted as errors pertaining to Compliance Status, Inspections, and Enforcement data varies slightly:

- ➤ 60% of Compliance Status error notifications;
- ➤ 46% of Inspections error notifications; and
- > 59% of Enforcement error notifications have been accepted.

As mentioned, only a random audit of compliance and enforcement records can provide an accurate quantified assessment of the quality of compliance and enforcement data in the data systems. Even so, the ratio of accepted error notifications to facilities with eligible records (i.e., those with at least one violation, inspection, or enforcement action) is a rough approximation of confirmed errors within the data displayed within ECHO. Using this technique:

- > 53,000 facilities in ECHO have Compliance Status data reported (i.e., at least one violation). Compliance Status error notifications were received for 1,075 facility records, 60% of which were accepted. Accepted notifications/eligible records⁵ = 1.2%
- > 87,400 facilities in ECHO have Inspection data reported (i.e., at least one inspection). Inspection error notifications were received for 108 facility records, 46% of which were accepted. Accepted notifications/eligible records = 0.07%
- ➤ 14,400 facilities in ECHO have Enforcement Action data reported (i.e., at least one action). Enforcement Action error notifications were received for 68 facility records, 59% of which were accepted. Accepted notifications/eligible records = 0.3%

The percentages above do not control for the likelihood that not all facility records were reviewed by the most appropriate facility or corporate staff. In addition, this estimate does not account for the fact that most of the compliance and enforcement data elements can and do have multiple data values per facility. Some facilities, typically the larger, more complex of those regulated, may have numerous inspections over two years, multiple enforcement actions, and numerous records detailing compliance history – e.g., both violations and date of return to compliance.

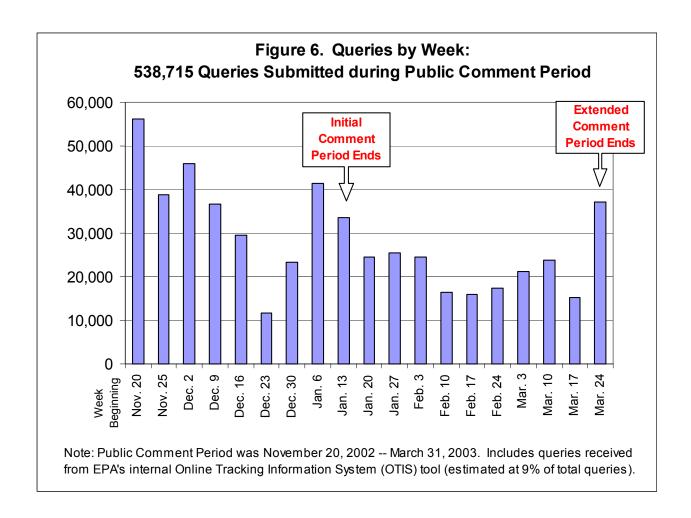
There were rarely any notifications from regulated facilities regarding the omission of violations or enforcement actions, even when EPA was aware that data flow problems would have caused current violation data not to flow into ECHO. Several public interest organizations did comment about errors of omission (false negatives), and as a result, EPA discovered violations that had not been entered into the program databases. Finally, records without compliance or enforcement activity are valid records for comparison with the level of accepted notifications, and if these were included, would show dramatically lower error rates for all three data elements.

⁵For these ratios, eligible records are facility records that have at least one entry for the particular compliance and enforcement element in the two-year time frame presented in ECHO. For example, with regards to Compliance Status data, 53,000 facility records present at least one violation; there are 53,000 eligible records.

4. Site Usage

ECHO has been accessed by a broad spectrum of users. As seen by comments received, ECHO users include regulated entities, state and local government employees, consultants, legal professionals, members of academia, non-profit organizations, federal government employees, and members of the general public.

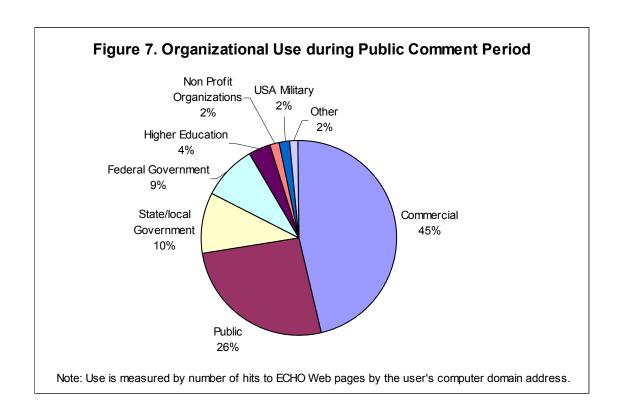
A total of 538,715 searches (queries) were performed during the comment period, presented by week in Figure 6. Each query represents a request for information from EPA's IDEA system, the database that maintains the information presented by ECHO. Thus the numbers displayed indicate frequency of in-depth use of the site, for example, conducting a search or viewing a Detailed Facility Report. While many Web sites report page hits, EPA believes the much lower "queries" metric is a more appropriate measure of the frequency of ECHO's usage.



Organizational Use

The ECHO site was primarily designed for public and industry users. The usage statistics indicate that corporate organizations and general public users did, in fact, dominate usage of the ECHO Web site. Figure 7 displays organizational use as counted by the number of hits to the

ECHO Web site. Organizational use is measured here in hits to the ECHO Web site because queries are not currently tracked at this level.



5. Quantitative Summary of Public Comments

A Federal Register notice [FRL-7410-5] on November 20, 2002, announced the release of ECHO and the start of a public comment period. Five questions were posed to solicit public comments about the pilot and on ECHO's content, design, and accuracy of the data in particular. Many official company or organization comments addressed these questions specifically. The majority of comments received were not structured according to this outline, but are summarized in this section according to the general categories addressed in the initial Federal Register notice:

Question 1: Does the site provide meaningful and useful information about the compliance and enforcement program?

Question 2: Is the site easy to navigate?

Question 3: Is the information in ECHO understandable and does the help text adequately explain the data?

Question 4: What additional features, content, or modifications would improve the site?

Question 5a: Is the data presented in ECHO accurate?

Question 5b: If you did need to submit an online error report, was the error reporting process easy to use?

The number of comments addressing each question is provided in the top row of each section of the Comments Received table (Table 7), followed by a distribution of specific statements or concerns. Some comments are applicable and were tallied at the subheading (bold text) level, but not at the more detailed comment level (non-bold, indented text). Due to the large number of comments, not all concerns or suggestions could be reproduced here. Comments included in the "Other" categories were not actionable, for example, very broad suggestions to add data without any specifying qualifications on the type of data. Comments are summarized in the table by the user's stated affiliation. If no affiliation was provided, the user is included in the category of "General Public." ECHO received thousands of form letter comments; these are indicated by totals in the "Mass Mailing" category to distinguish them from comments that appeared to be created and submitted individually.

Comment Summary

During the comment period, EPA received 11,309 comments on the ECHO Web site, typically related to the value or content of information presented by ECHO. An additional 260 user questions, enforcement tips, or complaints to regulatory officials also were received, but were not directly related to ECHO.

- ➤ Of the 11,309 comments, 10,659 of these consisted of a number of form letters. The form letters expressed a positive opinion of the Web site and made suggestions for enhancing the content and functionality of ECHO.
- The remaining 650 comments appeared unique and were submitted by individuals or organizations. These comments were received via different methods: an online comment submission form within ECHO; a telephone hotline established for user support; email comments sent to echo@epa.gov (an address posted on the ECHO Web site); or as hard

copy documents sent to EPA staff. One hundred and forty-seven (147) of these comments were sent along with attached documents, mainly by regulated entities and trade associations.

Table 6 provides the affiliation of users submitting comments on the ECHO Web site.

Table 6. User Affiliation	of Comments Received
User Affiliation	Number of Comments
Federal Government	24
State/Local Government	58
General Public	215
Public Interest Group	28
Regulated Entity	224
Commercial User	74
Trade Association	27
Mass Mailing	10,659
Total	11,309

Note: If no affiliation was provided, the user's comment is included under "General Public." User affiliation was not distinguished for form letter comments; these are included under "Mass Mailing."

Table 7. Comments Received	Federal Govt	State/Local Govt	General Public User	Public Interest Group User	Regulated Entity	Commercial User	Trade Assn	Mass Mailing
QUESTION 1: Does the site provide meaningful and useful information about the compliance and enforcement program? (Indicates the number of comments pertaining to the Federal Register question. Specific comments are included in the headings below.)	14	31	180	28	109	47	24	10,659
1.1 ECHO provides useful/important information	11	23	166	26	29	45	0	10,659
1.1a Increases public awareness of potential hazards in the community	2	3	40	12	2	2	0	1,824
1.1b Allows public to research locations where they are considering moving, sending their children to school, or buying property	0	0	2	0	0	2	0	
1.1c Facilitates environmentally conscious investment/purchasing decisions	0	0	0	0	0	4	0	
1.1d Informs decisions on employment/hiring contractors (e.g., use for due diligence)	0	1	0	0	4	1	0	
1.1e Reduces government's burden answering questions from the public	0	0	1	2	0	1	0]]]
1.1f Reduces facilities' burden answering questions from the public	0	1	2	0	0	0	0	i ! !
1.1g Increases government accountability-allowing people to track environmental enforcement efforts	t O	1	7	6	0	3	0	! ! ! !
1.1h Allows for multimedia enforcement efforts	0	1	0	0	0	0	0	
1.1i Allows public/private sector to check data quality	0	3	0	2	0	0	0	i ! !
1.1j Helps commercial users target facilities for their products or services	0	0	0	0	0	3	0	i ! !
1.1k Helps local government decide on new permits/discharges	0	0	2	0	0	1	0	
1.11 Increases accountability of facilities/regulated community	1	0	29	6	0	2	0	10,659
1.1m Complements existing environmental information databases	1	0	0	0	0	0	0]]]
1.2 ECHO does not provide meaningful and useful information	3	9	9	1	82	2	25]]]
1.2a Data are not detailed enough to characterize compliance	1	0	2	1	19	0	6	Î
1.2b Covers only a portion of EPA's data holdings (e.g., additional facilities and programs not included)	1	0	0	1	1	0	0	
1.2c Data are easily misunderstood	3	5	0	1	59	1	20	i ! !
1.2d Comparisons between states and between programs will be misunderstood	1	0	0	0	5	0	7	
1.2e Compromises homeland security	0	1	4	0	19	1	6	
1.2f Increases burden on regulated entities (e.g., to review data for accuracy, respond to public questions or lawsuits that arise from inaccurate data, etc.)	0	1	0	0	36	0	16	
1.3 Other	1	3	6	1	4	0	0	

Table 7. Comments Received	Federal Govt	State/Local Govt	General Public User	Public Interest Group User	Regulated Entity	Commercial User	Trade Assn	Mass Mailing
QUESTION 2: Is the site easy to use/navigate? (Indicates the number of comments pertaining to the Federal Register question. Specific comments are included in the headings below.)	6	13	56	11	45	22	3	10,659
2.1 The site is easy to use/navigate	2	3	33	6	26	14	1	10,659
2.2 Problems using/navigating site	4	9	18	6	22	6	3	
2.2a User had trouble finding the Detailed Facility Report	2	0	1	1	2	0	0	
2.2b User had trouble finding a specific facility	0	3	7	3	11	3	3	
2.2c County drop down no longer functions after using BACK button	0	2	2	1	0	0	0	
2.2d There are too many search buttons	1	0	0	0	0	0	0	
2.2e The "Minor Facilities" checkbox is not obvious	0	1	1	0	2	2	1	
2.2f Availability of advanced search form is not obvious	2	3	2	1	2	2	0	
2.3 Other	1	1	5	1	1	0	0	
QUESTION 3: Is the information in ECHO understandable, and does the help text adequately explain the data? (Indicates the number of comments pertaining to the Federal Register question. Specific comments are included in the headings below.)	13	33	46	18	126	29	24	10,659
3.1 Good information/help text adequate	3	4	16	11	6	8	1	10,659
3.1a Good/useful level of detail on Detailed Facility Report	0	0	1	6	2	1	0	
3.1b Good/useful level of detail in Data Dictionary/descriptions/definitions	3	2	1	5	4	0	1	
3.1c Good/useful level of detail in Compliance Summary Data (quarters of NC/SNCs)	0	0	8	6	0	0	0	10,659
3.1d Good/useful level of detail in CWA/NPDES data (by discharge point, environmental condition of receiving waters)	0	0	8	5	0	0	0	10,659
3.2 Misunderstood information/inadequate documentation	11	28	24	8	118	19	24	
3.2a Unable to interpret data on Detailed Facility Report	2	2	4	1	15	3	3	
3.2b Acronyms/codes difficult to interpret	3	7	7	5	29	3	5	
3.2c Could not locate information regarding refresh dates	0	0	0	0	1	1	2	
3.2d Could not locate information regarding data sources	1	4	1	0	16	3	0	
3.2e Compliance information and history are too limited	1	3	3	0	5	2	1	
3.2f Data are too detailed	1	0	0	0	2	0	0	
3.2g Data dictionary is not comprehensive (e.g., injunctive relief; addressed vs. unaddressed HPV; minors vs. majors; GIS coverage of "On Indian Land"; NCDB)	0	0	1	1	7	2	2	

Table 7. Comments Received	Federal Govt	State/Local Govt	General Public User	Public Interest Group User	Regulated Entity	Commercial User	Trade Assn	Mass Mailing
3.2h Explanation of technical terms is too complicated	1	2	3	1	1	0	2	
3.2i Unable to distinguish between administrative (reporting) and more serious violations	0	4	2	0	26	1	17	
3.2j Unclear that ECHO does not cover 'all' compliance/enforcement programs	2	3	5	2	1	1	0	
3.2k Unclear how the NMTH value is calculated	0	1	0	0	2	0	0	
3.21 Unclear who to contact to obtain more details about the data	1	3	1	0	11	4	2	
3.2m Length of time of violation is unclear (e.g., if violation is only for part of quarter, if length includes time for agency response)	1	1	0	0	30	1	8	
3.3 Other	3	6	2	1	22	1	7	
QUESTION 4: What additional features, content, and/or modifications would improve the	15	20	79	15	89	29	24	10,659
site? (Indicates the number of comments pertaining to the Federal Register question. Specific comments are included in the headings below.)								
4.1 Searching								
4.1a Allow searching by company and corporate parent	1	0	0	2	3	5	0	
4.1b Allow search by chemicals	1	0	0	0	0	2	0	
4.1c Increase the number of facilities returned	0	4	9	5	0	2	0	10,659
4.1d Limit the state drop down when a user selects a region	0	1	2	0	0	0	0	
4.1e Add county boundaries to the watershed selection tool map	0	0	1	0	0	0	0	
4.1f Allow drill down access to actual permit and inspection details (not compliance status)	0	0	5	1	0	0	0	
4.1g Increase demographic profiles search parameters (not just minority percentages)	1	0	5	2	0	0	0	8,835
4.1h Allow mapping of all returned facilities from Search Results page	2	0	0	0	0	0	0	
4.1i Make documentation information easier to find	2	4	1	4	11	1	6	
4.1j Make the Detailed Facility Report customizable so users can get only the elements they want	0	0	0	1	0	0	0	
4.1k Make Search Results page customizable so users can get only the elements they want, like TRI explorer	0	0	0	1	0	0	0	
4.2 Add Data								
4.2a Add more specific information on violations (e.g., whether the violation is paperwork or involves a release, what chemical, how much)	5	4	25	6	16	5	7	1,824
4.2b Add a compliance rating	0	0	1	0	0	0	0	

Table 7. Comments Received	Federal Govt	State/Local Govt	General Public User	Public Interest Group User	Regulated Entity	Commercial User	Trade Assn	Mass Mailing
4.2c Add emissions inventories	0	1	11	6	0	0	0	8,835
4.2d Augment NPDES discharge information with limits, not just the percentage over the limit	2	1	13	8	6	0	1	8,835
4.2e Add TRI data in the Detailed Facility Report and search	1	0	7	2	0	0	0	8,835
4.2f Add details on inspections, including the inspection report (e.g., permit, dates, persons involved, action)	1	0	15	8	1	1	0	10,659
4.2g Add more census data	0	0	3	0	0	1	0	
4.2h Add information on what actions were taken to get back into compliance	0	0	2	3	4	1	4	1 1 1
4.2i Add facility information such as size, age, diversity of operations, etc.	0	0	0	0	1	0	0	
4.2j Add data from additional databases (e.g., ERNS, BRS, GLP/FIFRA information, UIC facilities)	2	1	14	5	1	0	0	10,659
4.2k Add NPDES CAFO's, pretreatment, general permits, and storage facilities	1	0	13	6	2	2	0	10,659
4.21 Add a flag to indicate inactive RCRA permits	0	1	0	1	9	1	0	
4.2m Expand the portion of the regulated universe covered	2	0	4	1	2	0	0	
4.2n Add the names for nearby facilities in the mapping function	0	0	0	0	1	0	0	
4.20 Add trends of compliance for each facility	0	0	0	0	1	0	0	
4.2p Add facilities' corporate ownership	0	0	0	1	3	3	0	
4.2q Add contact links for details on the Detailed Facility Report	1	1	0	0	8	0	1	
4.2r Add more years of data	3	3	14	9	2	1	0	10,659
4.2s Add data on the total number of regulations a facility is subject to, for context on compliance	0	0	0	0	3	0	8	
4.3 Remove Data								•
4.3a Remove demographic data	1	1	2	0	11	0	8	
4.3b Remove latitude/longitude data	1	1	2	0	10	0	7	
4.3c Remove mapping function	0	0	0	0	8	0	1	
4.4 Clarify								
4.4a Clarify that return to compliance date is not an additional violation	0	0	0	0	2	0	0	
4.4b Change "0" inspections to "No Records of Inspections"	1	2	0	0	3	0	0	
4.4c Clarify which facilities are Majors and which are Minors	0	0	3	3	0	0	1	

Table 7. Comments Received	Federal Govt	State/Local Govt	General Public User	Public Interest Group User	Regulated Entity	Commercial User	Trade Assn	Mass Mailing	
4.4d Clarify percent minority calculation/Differentiate between ethnicity and race on Detailed Facility Report	0	0	1	0	1	0	0		
4.4e Improve presentation of complex locations (e.g., three "facilities" part of the same site)	1	0	1	0	1	0	1		
4.5 Miscellaneous									
4.5a Create sample reports so people know what is in ECHO	0	0	1	0	0	0	0		
4.5b Improve links to and from EnviroFacts	0	0	0	0	0	1	1		
4.5c Make data available in XML	0	0	1	0	0	1	0		
4.5d Retain column headers as you scroll down the Search Results page	0	0	1	1	0	0	0		
4.5e Link from the indicator of an enforcement action on the Search Results page straight to that part of the Detailed Facility Report	1	0	1	0	0	0	0		
4.5f Allow regulated entities to review data before updates made public	0	1	0	0	25	1	16		
4.5g Make a note on the Detailed Facility Report if error is reported (e.g., note "Data under review")	0	0	0	0	13	0	11		
4.5h Limit access to error reporting feature/Require verification from facility	0	0	0	0	16	1	8		
4.6 Other		7	20	6	31	7	15	1,824	
QUESTION 5a: Is the data presented in ECHO accurate? (Indicates the number of comments pertaining to the Federal Register question. Specific comments are included in the headings below.)				4	100	2	23		
5a.1 Data in ECHO are accurate				1	2	0	0		
5a.2 Data in ECHO are not accurate	1	9	6	0	77	2	23		
5a.2a The way the data are presented in ECHO make it not accurate (e.g., the date of returning to compliance)		1	2	1	14	1	2		
5a.3 Other	0	2	1	1	12	1	0		
NOTE: Only general statements about data quality are included.									
QUESTION 5b: If you did need to submit an online error report, was the error reporting process easy to use? (Indicates the number of comments pertaining to the Federal Register question. Specific comments are included in the headings below.)		4	2	0	70	3	20		
5b.1 The error correction process is easy and functional				0	16	0	2		
5b.2 Trouble with error reporting			2	0	59	1	20		
5b.2a Could not locate information on how to report an error	0	1	0	0	11	0	0		
5b.2b The contact time after reporting an error is too long		1	0	0	8	1	2		

Table 7. Comments Received	Federal Govt	State/Local Govt	General Public User	Public Interest Group User	Regulated Entity	Commercial User	Trade Assn	Mass Mailing
5b.2c The resolution time between when errors are accepted and when they are updated in the data system is too long/unclear		2	0	0	26	1	17	
5b.2d Errors could not be corrected (i.e., data could not be accessed/changed)		0	0	0	4	0	4	
5b.3 Other			1	0	8	2	0	

NOTE: Prior to adjustments made on December 4, 2002, some users reported problems using Error Reporting. These comments are not included.

6. EPA Response to Comments

After reviewing the comments received about the ECHO project, EPA catalogued each unique comment for response. Because comments were often repeated by many commenters, the categories were consolidated into the set below. This primarily was done to provide a more readable report that did not repeat the same answers. The particular comment(s) addressed from Table 7 by the categories in this section are noted following each comment. When possible, EPA provides a statement about whether the Agency agrees, disagrees, or needs more research on each topic. Also, a brief statement is provided in regard to whether EPA plans to make a change to the site as a result of the comment. The ECHO project has a limited budget and thus site changes must be prioritized within existing resources. In addition, because many of the proposed changes would impact the data flow and workload of our state/local partners (suppliers of the data), some requested changes cannot be fully considered and answered until a more thorough discussion with the states is concluded. Comments that are deemed as having an impact on state workload are noted as such. EPA will provide its preliminary view, but is not committing to site changes until future discussions with the states occur.

Please note that this section is not intended to respond to detailed error notifications. These are handled on an individual basis, and each site user reporting a data error will receive a final response/resolution to the error notification.

Overall Characterization of Comments Received About Federal Register Questions

EPA was very pleased with the volume and thoughtfulness of the comments received on the ECHO project. In relationship to the questions asked, the majority of commenters believed that the ECHO site provides useful and important data. Particularly the general public, public interest, and government users agreed the site had much value. In contrast, the majority of trade association and regulated entities commenting on the site said it did not provide meaningful and useful data. The majority of site users agreed that the site was easy to navigate, though suggestions were made to improve this area. EPA also requested comments on whether the site was understandable and whether the text adequately explained the information. EPA received an overwhelming number of "mass e-mail" responses from individual users stating that the site was understandable and easy to use. However, other comments received were weighted toward elements of the site that were confusing or in need of better documentation.

EPA received many comments on the question of what additional features, content, or modifications would improve the site. These included a host of options from better searching, new/additional data, longer time period of data, removal of data, clarification of data, and better download options. EPA also asked about data accuracy.

The majority of commenters agreed that ECHO, in order to be a successful and meaningful product, must have high quality data. In response to EPA's question regarding data accuracy, few comments were made by the general public. Most commenters from the regulated community responded that the data within ECHO are not accurate. As noted earlier in this report, the percent of data records found to have errors was low. This indicates that facilities not finding data errors did not make official comments to EPA regarding data quality. This may be attributable to the fact that many comments were submitted by trade organizations representing

large numbers of regulated facilities. If a small percentage of the member companies of these associations noted data errors, the trade association is likely to report this as a general problem.

The last question requested feedback on the ease of use of the error reporting feature within the site. Most commenters who used the reporting feature did not respond to this question. This may indicate some level of satisfaction (that the overall level of complaints about this feature was low). However, of the respondents that did comment on the feature, the majority said they had trouble with it. The problems did not relate to the functioning of the Web feature, but instead to the lag time to get issues resolved and changed on the site.

Detailed Response to Comments

A. Data Accuracy

A1. Comment: The data accuracy of the ECHO system is not high enough and needs to be improved. [Addresses comment 1.1a from Table 7]

Response: EPA places a very high priority on ensuring the integrity of information that is included in the national enforcement and compliance databases. This effort includes close coordination with states on issues of data transfer, entry, and presentation. EPA and the states engaged in an intensive eight-month data quality review period prior to the release of the ECHO site. Despite the confidence EPA has in the data, even a 1% error rate would mean that a large number of facilities would have information shown that needed correction. The decision to release ECHO in "pilot" mode provided the opportunity for facilities to review their data in an easy-to-use, online site. EPA provided many caveats on the site so that users would understand that the pilot period was being used so that errors not discovered during the internal review period could be made known to EPA and promptly corrected.

The regulated community did find some errors, and these have been corrected or appropriately flagged. The rate of weekly error notifications submitted during the public comment period was typically in the 200-400 range. After the comment period ended, the ECHO site has remained on the Internet with the active error reporting feature. The number of error reports has decreased to approximately 50 per week since the end of the comment period. Statistics for error notifications and site use (measured by queries) during and after the comment period are presented in Table 8. During the comment period, EPA received one error notification per every 72 queries. In the seven weeks after the comment period, EPA received one notification per 312 queries. This may indicate that the errors not found during the initial EPA-State review have been largely addressed and dealt with as a result of close review by the regulated community during the initial four months of the pilot.

Table 8. Weekly Site Usage and Error Notification Activity							
		Queries by Week	Error Notifications by Week				
ECH	O Web site lauı	nched November 20, 200	2				
Comment Period	Nov. 20	56,219	292				
	Nov. 25	38,894	220				
	Dec. 2	45,979	420				
	Dec. 9	36,697	380				
	Dec. 16	29,419	516				
	Dec. 23	11,563	111				
	Dec. 30	23,318	238				
	Jan. 6	41,326	679				
	Jan. 13	33,672	848				
	Jan. 20	24,478	285				
	Jan. 27	25,546	279				
	Feb. 3	24,438	204				
	Feb. 10	16,348	194				
	Feb. 17	15,860	354				
	Feb. 24	17,437	122				
	Mar. 3	21,264	355				
	Mar. 10	23,917	282				
	Mar. 17	15,230	329				
	Mar. 24	37,110	948				
Comi	ment Period En	ds March 31, 2003: fication Rate = 1 notificati					
	Apr. 1	13,388	66				
	Apr. 7	13,650	44				
	Apr. 14	30,613	47				
	Apr. 21	13,894	34				
	Apr. 28	12,467	59				
	May. 5	12,387	73				
	May. 12	13,227	18				
Post		od (as of May 19, 2003): ication Rate = 1 notification	on/ 312 queries				

As ECHO holds records for 800,000 facilities (of which about 81,000 have substantial compliance and enforcement data), the number of errors reported (6,915) is a relatively small proportion of the facilities within the site. However, not all facilities made use of ECHO during the review period, so 800,000 is not an appropriate denominator for determining the accuracy of the data. Furthermore, EPA notes that a high percentage of comments were related to basic facility name and address data. This information, if in error, is normally a function of a failure by the regulated facility to provide updated information to the appropriate permitting authority. Though EPA recognizes the challenges of reporting this information at multiple times to multiple offices, the bulk of the 3,315 facility identification errors reported to EPA are not indicative of the quality of compliance and enforcement data (the focus of ECHO). (Note: statistics based on Error Tracking System records.)

Leaving the facility identification comments aside, approximately 3,600 comments were received on inspection, compliance status/violation, and enforcement action data. Of these comments, approximately 59% were accepted as errors after review by the data steward. As discussed in Sections 2 and 3 of this report, the number of compliance and enforcement data elements that had to be corrected are proportionally small when compared to the number of facilities in the database (800,000+), the number of queries run within ECHO (500,000+), and presumably in comparison to the number of facilities that viewed their reports (this number is not known and cannot be collected by EPA). Additionally, a typical facility report is derived from hundreds of data elements, and if one of these data elements is incorrect, EPA does not believe the entire report is invalid.

EPA and the states take the role of data stewardship very seriously, and are continually working together to ensure that individually reported errors are attended to as quickly as possible. EPA does not want to minimize the concern of individual facilities or companies that were affected by errors. However, on balance, EPA's evaluation of data quality within ECHO during the comment period, based upon Error Tracking System statistics, leads to the conclusion that the information is of high quality and clearly supports the posting of information on the Internet. The presence of a robust error correction feature on the ECHO site along with an extensive EPA/State data quality network to quickly respond to possible problems appear to have successfully addressed errors in the system that were not caught during the initial EPA/State data review. See Section 3 for more information.

A2. Comment: EPA should design a system so that only regulated facilities can challenge their own reports. This system should allow verification to EPA that the facility is the one submitting the comment. [Addresses comment 4.5h from Table 7]

Response: EPA disagrees with this suggestion. Though the majority of comments about facility data do come from facilities, EPA has received valuable information from third parties. Additionally, EPA has received comment from several groups indicating that violations and enforcement actions taken at facilities were missing from the ECHO reports. Affected facilities usually did not submit these errors of omission. Collecting error notifications from all parties is valuable to the Agency, and all error notifications are carefully reviewed by those responsible for the data before any changes are made.

A3. Comment: When data are challenged by a facility during the error notification or comment process, EPA should immediately raise a data quality flag so that users are aware of this challenge. [Addresses comment 4.5g from Table 7]

Response: EPA does not believe that a "challenge flag" is necessary for several reasons. First, the statistics in this report show that a high percentage of comments are either rejected (not true errors), or are not directly relevant to the compliance status of a facility. Over 40% of errors reported on compliance and enforcement data during the comment period were rejected. Automatically posting a data quality flag in most cases will obscure the fact that the core information in the report is correct. For those errors relating to compliance data that are accepted as errors, EPA responds quickly and the erroneous data does not stay in the system for long periods of time. During the ECHO project, EPA and the states have demonstrated a track record in which 61% of comments were responded to within 30 days, and 86% of comments

were responded to within 60 days. These rates indicate a high level of responsiveness, and will improve over time for the following reasons. First, the volume of error reports received during the comment period was taxing for states with small data entry staffs. Since the comment period ended, the order of magnitude drop in error notifications brings a much more manageable workload. Second, the data stewards are now experienced with the most common errors reported and can operate more efficiently. Third, EPA released a diagnostic tool to the data stewards after the comment period ended that makes tracking submitted errors much easier. Also, EPA is concerned that adding a challenge flag would encourage spurious comments designed to cloud the actual veracity of a facility report (for example, reporting an error that "Inc." should be "Incorporated" in the facility name).

A4. Comment: If categorical data problems are known (for example, data from a particular state are not being sent to EPA), EPA should not only list these in a "caveats" document, but should attempt to associate a data quality flag in a place where the data user would be looking (on the actual facility report). [Addresses comments 1.2d and 3.2 from Table 7]

Response: ECHO raises a data quality flag if the data cannot be corrected in a reasonable amount of time. EPA agrees that if categorical problems are known, a categorical flag is needed to alert users that information may be missing or outdated. EPA anticipates modifying ECHO so that errors of omission arising from data sharing problems between EPA and the states are noted on the relevant facility reports. EPA anticipates that this change will be made within six months.

A5. Comment: EPA should keep the ECHO site running regardless of imperfections in the data. [Addresses comment 1.1 from Table 7]

Response: EPA plans to continue offering the ECHO site on the Internet and to be responsible for posting accurate data. Because the review period has demonstrated a high level of data quality, the site will remain online.

A6. Comment: EPA should suspend the availability of ECHO or set better disclaimers about data accuracy. [Addresses comment 1.2 from Table 7]

Response: EPA does not believe the ECHO site should be removed from the Internet, but will explore adding additional disclaimers to provide appropriate context to the information on the site.

A7. Comment: EPA should allow facilities to review their data before it is posted on the Internet. [Addresses comment 4.5f from Table 7]

Response: EPA does not plan to offer prior review to facilities. The existing high level of data quality does not justify this additional level of review and its associated cost. EPA is not aware of any practical approach to pre-disseminate information to more than 800,000 facilities and did not receive any suggested approaches for doing so. The Freedom of Information Act also restricts EPA's ability to provide a private data review for one group while denying such access to other groups.

A8. Comment: ECHO places an undue burden on facilities by requiring them to periodically review their information for data quality problems. [Addresses comment 1.2f from Table 7]

Response: EPA does not require facilities to review their data, but recognizes that many facilities will choose to do so and have valid business reasons for examining the information. Prior to the release of ECHO, EPA provided similar data to external parties through Freedom of Information Act requests. Facilities included in these printouts generally were not aware of what these reports included, even though third parties had access to the printouts. ECHO provides an improvement by providing interested facilities with an easy way to check their data. These facilities no longer have to go to the trouble of submitting FOIA requests or learning how to use EPA mainframe computer systems. Additionally, the ECHO data services are offered at no charge, while there is a charge for access to this information via FOIA or EPA's mainframe. Though interested facilities may have had to spend some time reviewing the original reports during the comment period, subsequent review time will be very low because each period adds only one month of data. Additionally, facility staff are now becoming more familiar and comfortable with the site.

A9. Comment: Why are demographic statistics not shown for all facilities? [Addresses comment 4.2g from Table 7]

Response: The demographic data is derived from 2000 Census files if latitude/longitude coordinates are available. In some situations, EPA does not have a valid latitude/longitude. EPA is working on several locational data improvement projects, and expects that the availability of demographic data will increase as these coordinates are ascertained.

A10. Comment: Several recent violations identified by EPA are missing, and some violations noted in complaints and press releases are not showing up within ECHO. [Addresses comment 5a.2 from Table 7]

Response: EPA has evaluated this issue and determined that procedures for entering violations when enforcement cases are managed from EPA headquarters should be improved. Typically, the EPA regions perform the data entry; however, some violations handled at the national level were missed. EPA is taking steps to remedy this problem.

A11. Comment: Problems exist with the NPDES permits renewal/expiration dates data. [Addresses comment 5a.2 from Table 7]

Response: EPA will make the regions and states aware of this comment, and will provide better caveats on the site indicating that the date displayed on the report is the expiration date of the existing permit but that the permit continues to be in force as long as the permittee has filed a timely re-application, even if the EPA or state regulatory agency has not re-issued the permit. EPA is aware that a permit backlog exists, and the ECHO reports should not mislead the public into thinking that the regulated community did not properly apply for a new permit. Where this data is incorrect, facilities should submit an error notification from the site.

A12. Comment: EPA should remove old violations if they are determined to be erroneous by the data steward. [Addresses comments 4.3 and 5b.2d from Table 7]

Response: EPA agrees that violations should be removed from the system if they turn out to be data errors. The RCRA and AFS databases allow the data stewards to make these changes. The PCS database allows violations to be removed; however, some historical significant noncompliance data cannot be changed due to PCS limitations. In these situations, the facility report will receive a data quality flag indicating the error. EPA is modernizing PCS and will enable these edits to be made in the future.

A13. Comment: Facilities should not be listed in significant noncompliance (SNC) for the Clean Water Act if reports were submitted on time but were not entered in the system by EPA or the state in a timely manner. [Addresses comments 1.2c, 1.2d and 5a.2 from Table 7]

Response: EPA agrees these facilities should not be listed in SNC for not submitting the report on time. During the EPA/state data quality review (prior to ECHO launch), the vast majority of these errors were cleaned out of the system. Also, many states have instituted better management practices to ensure that the data is immediately entered. In circumstances when a problem is detected, EPA and the states have the ability to override the determination of the data system. With these checks in place, EPA believes this problem is very small. However, facilities affected by this problem should report an error and notify EPA if a repeated pattern is apparent.

A14. Comment: Does the ECHO project comply with the Data Quality Act and Information Quality Guidelines? [Addresses comments 1.2 and 5a.2 in Table 7]

Response: Yes. The Information Quality Guidelines that implement the Data Quality Act apply to most applications where EPA presents information to the public in more than a passive way. ECHO fulfills the intent, principles, and requirements of the Guidelines by:

- being easy to use for those with minimal computer skills;
- providing answers to frequently asked questions;
- providing definition of terms;
- providing caveats on use;
- including intensive site design review and correction of the data by the originators of the data;
- providing for comment and response by the public under a pilot period;
- providing for error reporting and correction using an Internet process integrated with ECHO; and
- providing opportunity for further request for correction or reconsideration under the Agency process.

A15. Comment: State agency funding should be conditioned on prompt response to errors and management of accurate data sets. EPA should structure its funding to states in a way that penalizes states for poor data entry practices. [Addresses comments 5a.2, 5b.2b, and 5b.2c in Table 7]

Response: EPA is working closely with all states to ensure that ECHO data is of high quality. EPA understands that states face many challenges (budget, technology, etc.) in getting

information entered into the systems. When problems are discovered in data quality or handling of error notifications, EPA has received cooperation from all states in getting the problems resolved in a timely manner. Restricting funding to states is an option of last resort that will likely not be necessary. EPA does agree that EPA and states should be publicly accountable for having high quality information – ECHO provides one measure of accountability by making the information easily accessible for outside review.

B. Error Reporting Process

B1. Comment: EPA should institute a customer service standard for responsiveness to data error notifications. [Addresses comments 5b.2b and 5b.2c in Table 7]

Response: EPA generally favors developing customer service standards; however, there is not a one-size-fits-all approach for resolving potential errors. EPA has instituted internal practices to ensure that errors do not linger in the system. This includes follow-up emails to data stewards and management when errors are taking a long time to process, evaluation of response times by state and region, and frequent national conference calls to discuss processes and procedures. Because some errors require substantial research and often require additional documentation from the facility, we cannot set one time period to resolve all errors. Individual users who experience problems in this area can make requests directly to the data steward, or can contact ECHO for additional help. EPA also may raise a data quality flag if a problem exists in getting a confirmed error corrected.

B2. Comment: EPA should provide better tools for the public to track the resolution of error notifications; for example, the list of data stewards should be posted on the ECHO site. [Addresses comments 5b.2b and 5b.2c in Table 7]

Response: When a commenter submits an error notification on the ECHO Web site, s/he receives confirmation that the notification was received, and a notification of which data steward has been assigned to respond. The data steward, after making the decision, will provide the relevant information about resolution of the error (this email is sent from the centralized error tracking center). Because all commenters are provided with the name of the responsible data steward (and are able to communicate with this person individually), there is no need to post the complete table of all data stewards. Posting this table may promote the discussion of potential errors outside of the national tracking system. Circumventing this process limits EPA's ability to track the frequency and resolution of errors, and removes a chain of responsibility that is sometimes needed to reconstruct how an error was handled.

B3. Comment: EPA should post a process on the ECHO site for complaints if there is a long delay in getting an error resolved or if the commenter does not agree with the resolution/explanation provided by the data steward. All data challenge processes should be explained on the site. [Addresses comment 5b.2 in Table 7]

Response: The ECHO site includes information about data quality challenges; however, EPA will augment the existing information to discuss the subject in more detail. EPA will add additional information to the frequently asked questions (FAQ) document on the ECHO Web site. This information will explain the process for elevating the issue if a long delay is

experienced or if a commenter wishes to dispute the resolution/explanation provided. This also will provide a link to the appeal process that is available to commenters under the Information Quality Guidelines (http://www.epa.gov/oei/qualityguidelines/index.html).

B4. Comment: EPA should notify the facility if a third party submits an error notification. [Addresses comment 4.5h from Table 7]

Response: EPA and the states will evaluate comments on a case-by-case basis to determine whether the facility needs to be contacted about any changes suggested by third parties. EPA does not plan to automatically make these notifications.

B5. Comment: EPA should email facilities each time reports change. [Addresses comment 1.2f from Table 7]

Response: Reports in ECHO change every month. EPA does not plan to notify all facilities that new information is available. However, EPA has now made a "subscribe" feature available within the site. Users who want to be notified when a new month of data becomes available can subscribe and get these monthly reminders. Additionally, EPA has made the location of data update schedules more prominent on the Web site.

B6. Comment: EPA should provide a text box for facilities so that comments or response to individual reports can be posted on the EPA Web site, so users can gain the facility's perspective on the data. [Addresses comments 1.2a, 1.2c, and 3.2e from Table 7]

Response: This is not a function that EPA believes should be managed by the government. Such a text box would function like an Internet "chat room". This is neither an appropriate nor practical function for EPA to perform. Third parties that wish to post interpretations of data within ECHO are able to do so on their own Web sites. EPA will add a statement to the ECHO detailed facility report indicating that users may want to check company Web sites for explanations.

B7. Comment: EPA should allow facilities to designate a single point of contact for making error notifications to ensure that third parties do not make false or erroneous submissions. [Addresses comment 4.5h from Table 7]

Response: EPA does not agree that error reporting should be limited to regulated facilities. During the ECHO review period, EPA did receive feedback from third parties indicating when enforcement actions or violations discussed in publicly filed complaints were missing from ECHO. In this example, third parties provided EPA with valuable corrections to the data that were not submitted by the regulated entity. In regard to designating a single point of contact at a facility for corrections, each company or facility can choose its own policy in regard to which employees can provide error reports to EPA.

B8. Comment: EPA should allow anonymous error reporting. [Addresses comment 5b.2 from Table 7]

Response: In order for EPA to respond to an error notification, more detailed information or

supporting documentation may be needed from the commenter. For this reason, some very basic contact information must be collected in order for the error to be processed. However, for users who want to make truly anonymous tips or complaints, ECHO has a link to the tips/complaints page that is maintained by the Office of Enforcement and Compliance Assurance at www.epa.gov/compliance/complaints_echo.html. This existing tip page does not require contact information

B9. Comment: EPA should make the facility information unavailable once an error is submitted. [Addresses comments 4.3 and 4.5g from Table 7]

Response: Almost half of all errors submitted involved minor corrections to name and address data – changes that EPA believes do not invalidate the compliance data. Of the error notifications received on compliance and enforcement data, over 40% were found not to be errors. When an error was accepted, the average resolution time was 26 days. EPA plans to continue showing the reports while processing the error as quickly as possible. In situations when there is some problem in getting a timely correction to the database, EPA will continue to utilize a flag that will explain the data problem to users.

B10. Comment: EPA should allow users to make multiple error notifications on the Detailed Facility Report. [Addresses comment 5b.2 from Table 7]

Response: The error notification process is tailored to reporting on a line of the report to facilitate quick handling by the data steward. If a particular problem exists with submitting information this way, users can click on the "Report a General Error" button and type all their comments into one form. This may increase the response time because EPA may need to "parse" these out to multiple data stewards – particularly if the notifications are across all databases.

C. Policy/Regulation

C1. Comment: Will EPA remove the Sector Facility Indexing Project (SFIP) Web site within the next year because ECHO provides the majority of the features contained within SFIP? (SFIP was a forerunner to the ECHO project that posted data online for six industries and federal facilities beginning in 1998). [Addresses comment 4.6 from Table 7]

Response: While most of SFIP's features are handled by ECHO, SFIP provides valuable information on a sector basis that is not available in ECHO. EPA is investigating ways that ECHO can absorb some of the unique features of SFIP within the next year.

C2. Comment: EPA should not include "dormant" or inactive Resource Conservation and Recovery Act sites on the ECHO search page. [Addresses comment 4.21 from Table 7]

Response: EPA agrees that the default ECHO searches should exclude inactive Resource Conservation and Recovery Act sites, but also believes that these sites should be searchable for advanced users – particularly those interested in knowing the prior uses of land. While EPA is able to exclude inactive Clean Air Act and Clean Water Act facilities, no inactive designation exists in the underlying RCRAInfo database to allow such exclusions for Resource Conservation

and Recovery Act facilities. Due to this system limitation, EPA has now formed a workgroup with the states to develop a national policy for "inactivating" facilities under the Resource Conservation and Recovery Act program. EPA expects this workgroup process to take six months, with an additional six months needed for implementation. When the change is implemented, ECHO will no longer show the inactive sites unless the user specifically asks for them, and then they will be designated as such. As a short-term option, inactive facilities can be identified as such with a qualifying statement posted on the facility report with a data quality flag. This is done when a facility requests that a site be shown as inactivated and the appropriate data steward agrees with the request.

C3. Comment: EPA should implement a consistent "naming" protocol for facilities. [Addresses comment 2.2b from Table 7]

Response: The existing statutory and regulatory requirements that EPA administers involve the submission of information on a program-by-program basis. For example, a regulated facility may be required to submit a Resource Conservation and Recovery Act notification form to an authorized state government, a Toxics Release Inventory annual report directly to EPA via an online process, and a Clean Air Act permit application directly to a local authority. The information provided to each separate regulatory authority is done at different times – often from different people at the facility. Because this separate system of collecting facility data exists, the ECHO reports often contain all of the different facility identification data. To date, EPA has not established a consolidated reporting structure that would allow all environmental submissions to be updated through a submission to a centralized registry. This feature could reduce the reporting burden of facilities that undergo name changes. However, the existing set of regulatory requirements at the federal, state, and local levels would need to be changed to accommodate such a reporting structure. EPA is actively identifying opportunities to move toward a more standardized naming protocol.

C4. Comment: EPA should adopt a uniform national data collection procedure with states. [Addresses comment 1.2d from Table 7]

Response: EPA is working with the states to continue maintaining and modernizing the flow of data into EPA data systems. EPA recognizes that some states use EPA data systems through direct entry of information, while other states prefer to operate their own data systems and send the data files to EPA. Several efforts are ongoing to both modernize the systems that EPA uses, and to make it easier for states to send (or "batch") data to EPA. EPA is working with states on the new National Environmental Information Exchange Network (Exchange Network). The Exchange Network creates standards-based methods for the collection and reporting of environmental information between EPA and the states through a collaborative process. These efforts all require the maintenance of national definitions and protocols to ensure that the information is consistent. EPA recognizes that this is critical to maintaining quality information and will continue working to promote data standards in the transactions that occur with the states.

C5. Comment: The format of the ECHO reports and the general way that EPA collects enforcement and compliance data results in a significant time gap between when a violation is corrected by the facility, and when the violation is turned off by EPA or the state. EPA should

develop procedures to ensure that "events" are captured only for the time period when the event occurred, or alternatively should allow a database flag indicating the facility has corrected the noncompliance, but the government has not yet verified this. [Addresses comment 3.2m from Table 7]

Response: EPA agrees that the violation status of the facility should be reflective of length of time that the facility is actually in violation. In some cases, the violation pre-dates the inspection. In this case, clear evidence showing the violation occurred earlier than the inspection should be entered into the database. When the facility returns to compliance and meets conditions of any enforcement orders, a violation end date should be entered into the system. These general rules of thumb vary across programs due to different regulations and procedures.

This is particularly true because the regulatory agency is not normally present at the exact time the facility corrects its problems. Therefore, change in compliance status requires some type of verification. EPA suggests that a regulated facility seeking to "end" a violation within the ECHO report should provide any available documentation to the regulatory authority that would indicate the violation has been corrected. In some situations, this documentation may be sufficient to end the violation in the database. In other instances, EPA and the states may need to perform actual site visits to determine resolution. Facilities may request that an inspection be done for the purposes of verifying the facility's return to compliance; however, because EPA and the states implement specific work plans for committing inspection resources, requests for inspections can not always be honored if they conflict with existing priorities. Given these constraints, EPA does recommend that facilities first provide documentation, and if this documentation is not accepted, enter into a dialogue with the regulatory authority about what steps are needed to end the violation in the database.

C6. Comment: EPA reports should not show proposed penalties, only "assessed" penalties. [Addresses comment 1.2c from Table 7]

Response: The ECHO project focuses on providing the public with information that is publicly available. For closed enforcement cases, ECHO provides the final assessed amounts. However, if the case is not closed, EPA will continue to provide the penalty that is proposed in filed complaints, which are public documents.

C7. Comment: When EPA takes an enforcement action against multiple facilities within the same corporation, the amount of penalty should be pro-rated among the facilities rather than shown as the total amount for each individual facility. [Addresses comment 1.2c from Table 7]

Response: EPA believes the public should be provided with the total corporate penalty amount; however, EPA agrees that some notation should be made on the ECHO site so that the public users do not think that each facility has been fined by the total amount of the corporate penalty. In the short term, EPA has addressed this issue by adding a special character on the ECHO Detailed Facility Report with a caveat that explains when a penalty is associated with a multifacility case. This will alert users that the penalty amount does not apply to only the facility shown in the report. As EPA continues to modernize its data systems, additional options for presenting this information will be examined.

C8. Comment: EPA should always notify the facility of the violation before posting violation data on the ECHO Web site. EPA should not put inspector judgments into the database unless an NOV has been issued. [Addresses comments 4.3 and 4.5f from Table 7]

Response: That is EPA's general practice, but EPA does not agree that prior notification is necessary in every circumstance. EPA has provided guidance to the states indicating that violations should be made known to the facility, and that management approval of the government's compliance determination be completed before the decision that a violation be put in the system. When inspectors enter a preliminary compliance determination prior to management review, this information is withheld from the public until an official determination is made. However, there are certain noncompliance events that EPA does not believe need to be "noticed" to the facility, particularly violations that are determined as a result of self-reporting. Under the Clean Air Act and Clean Water Act, EPA receives routine reports and monitoring information directly from the facility. These reports allow EPA or the state to make a compliance determination based upon the self-reported data. In these situations, EPA does not believe the government needs to provide notice to the facility that a violation has occurred. For other violations determined through inspections, EPA will continue to work with the states to ensure that facilities are made aware of detected violations.

C9. Comment: If a facility wins an enforcement case, EPA should go back and strike out the violation and enforcement case information so that there is no mark against the company. [Addresses comments 4.3 and 5b.2d from Table 7]

Response: In most cases, EPA's data systems allow violations to be removed from the system, if appropriate. Some historical data elements within PCS cannot be changed. For elements that cannot be changed by the data steward, EPA will raise a data quality flag within the facility's report that indicates the error. EPA's enforcement case tracking database, Integrated Compliance Information System (ICIS), will normally indicate if EPA has lost a case through litigation. This information will be reflected in the ECHO case report.

C10. Comment: Significant noncompliance, if shown on the Web site, should be subject to public notice and comment. [Addresses comments 4.6 from Table 7]

Response: The ECHO site provides the ability to comment on the data, as well as links to the actual policies, when electronically available, and definitions. EPA does not plan to treat SNC determinations as rule makings, as this is not practical nor legally appropriate.

C11. Comment: After a violation is discovered, EPA should have to prove that the violation is continuing rather than the facility proving it is back in compliance. [Addresses comment 4.6 from Table 7]

Response: EPA and states are not able to constantly monitor every facility, so the compliance determination is normally based upon the latest information available to the regulatory agency. If the status is incorrect, the facility has the ability to challenge the status via the online error notification process.

C12. Comment: Many states do not appear to be putting violations into the database. [Addresses

comments 1.2d and 5a.2 from Table 7]

Response: EPA is analyzing the data to look for trends and patterns that may suggest some states are not informing EPA of violations that are found. The results of this analysis will be used to begin discussions with those states where there may be errors of omission (violations or enforcement activity missing from ECHO).

D. Technical Issues

D1. Comment: EPA's databases do a poor job at showing the connection between inspections, violations, and enforcement actions. For example, what inspection led to the violation, and what action was taken in response to the violation. The ECHO reports should attempt to show these connections whenever possible. [Addresses comments 3.2, 4.2a, 4.2f, and 4.2h from Table 7]

Response: Not all of EPA's systems collect the data in this manner. Therefore, in the short-term, we cannot simply revise the report to show these connections. However, EPA agrees that this function would provide an improvement and will examine: a) taking advantage of connections that can be made using existing data to show these relationships, and b) discussing with the states how this information can be captured in the future as the data systems are modernized and integrated within the Integrated Compliance Information System.

D2. Comment: EPA should add a "subscribe" feature to notify users of site updates and database refreshes. [Addresses comment 4.6 from Table 7]

Response: EPA agrees with this comment and has added that function to ECHO.

D3. Comment: ECHO contains several links to other databases - particularly Envirofacts. EPA should provide some indication that the user is leaving the ECHO site. [Addresses comment 4.5b from Table 7]

Response: EPA agrees that this would provide an improvement to the site, and will determine the best method for indicating that the user is switching sites.

D4. Comment: When a user clicks on the Data Dictionary, it should open in a new window rather than replacing the report. Similar comment provided for the Acronyms page. In addition, some users had problems finding the Data Dictionary. [Addresses comment 4.1i from Table 7]

Response: EPA agrees this functionality would improve the site and has made the change regarding the data dictionary, and will make the change with the Acronyms page. A link to the Data Dictionary also has been added to the home page.

D5. Comment: ECHO should allow searching based upon pollutant type. [Addresses comment 4.1b from Table 7]

Response: EPA agrees this change would be useful. However, the change is complicated and beyond the resources currently available to the project.

D6. Comment: The user should be able to search based upon the statute violated. [Addresses comment 4.6 from Table 7]

Response: ECHO does provide the ability to perform separate searches for violations of the Clean Air Act, Clean Water Act, and Resource Conservation and Recovery Act. EPA plans to provide the functionality to search on additional statutes for federal cases that are available from the ICIS system.

D7. Comment: ECHO should provide the ability to search for only data (e.g., new violations) from the most recent reporting period. [Addresses comment 4.6 from Table 7]

Response: EPA believes that this suggested enhancement to ECHO would be beneficial. However, EPA has limited resources for making enhancements to ECHO and thus must balance the anticipated value and cost of one potential enhancement with other potential enhancements. This particular enhancement is likely to be difficult and resource intensive. Thus, EPA does not expect to be able to implement this in the near term. EPA does intend to keep a list of suggested enhancements and will periodically review them to determine which can be implemented in the future.

D8. Comment: The Violations column on the Search Results screen is misleading. [Addresses comment 1.2c from Table 7]

Response: The Search Results screen provides a brief summary of a facility's data, details of which are provided on the facility's detailed report linked from this screen. EPA does not believe the screen is misleading as it clearly states the determination is a 2-year determination (not a current status). The documentation available from the column heading link clearly states this, and the detailed dates are available by clicking into the facility report.

D9. Comment: Say "No Records of Inspections" instead of "0" inspections. Also, do not say "never" under the facility report "Date of Last Inspection" column. [Addresses comment 4.4b from Table 7]

Response: EPA believes ECHO should distinguish between those facilities never inspected, versus those that have been inspected, but not within the date range shown in the report. A zero in the first column indicates that no inspections have occurred under the relevant programs in the past two years. The second column represents the date the facility was last inspected under the program area noted, and "never" succinctly and appropriately describes this particular situation. EPA does recognize that in some cases, not all inspections are entered into the national databases, and EPA is working with states to encourage complete reporting. This will be noted in the Quality of Data section of the ECHO site.

D10. Comment: Measure pH exceedances in Standard Units. [Addresses comment 4.6 from Table 7]

Response: EPA agrees that percentages are not the best way to present this information. ECHO facility reports are being modified to show pH exceedances as a number over or under permit limit rather than as a percent exceedance.

D11. Comment: Provide Clean Water Act discharge amounts in addition to the percentage of exceedance. [Addresses comment 4.2d from Table 7]

Response: EPA believes that this suggested enhancement to ECHO would be beneficial. However, EPA has limited resources for making enhancements to ECHO and thus must balance the anticipated value and cost of one potential enhancement with other potential enhancements. This particular enhancement is likely to be difficult and resource intensive. Thus, EPA does not expect to be able to implement this in the near term. EPA does intend to keep a list of suggested enhancements and will periodically review them to determine which can be implemented in the future. Some of this data is available on the Envirofacts site, although it is incomplete.

D12. Comment: Convert Clean Water Act violations data from quarterly to monthly on the facility reports. [Addresses comments 1.2a and 3.2m from Table 7]

Response: EPA agrees that a monthly report that would improve the ECHO site, and will begin working on this additional report.

D13. Comment: Allow aggregate data calculations such as percent of facilities inspected by state. [Addresses comment 4.6 from Table 7]

Response: At this time, EPA does not have plans to provide a statistical interface.

D14. Comment: Provide users the ability to sort the data on the facility reports or to display only selected data elements. Provide users the ability to display only selected fields on the results screen. [Addresses comments 4.1], 4.1k, and 4.5c from Table 7]

Response: Although these features are not feasible at this time, EPA is developing ways to provide data files for users, including downloading capabilities. Users would then be able to use spreadsheet software to sort data as needed.

D15. Comment: Some users had trouble locating information on how to report an error, or asked that the site include more instructions on the error reporting screen. [Addresses comment 5b.2a from Table 7]

Response: EPA will provide a link from the error reporting screen to the How to Report an Error page. In addition, the home page redesign will make the link to that page easier to find.

D16. Comment: The results from facility name searches should be improved. [Addresses comment 2.2b from Table 7]

Response: EPA believes that the ECHO name search function works well. It is inclusive in that all program database names are searched. EPA believes this approach is superior to narrower searches that might miss facilities of interest.

D17. Comment: The home page could be improved by making clear which facilities are being searched and the availability of advanced searching. Also, information regarding refresh dates should be more obvious. [Addresses comments 2.2e, 2.2f, and 3.2c from Table 7]

Response: EPA agrees and has redesigned the home page.

D18. Comment: Suggest miscellaneous technical changes regarding site functionality. [Addresses comments 2.2c, 2.2d, 4.1c, 4.4e, 4.5d, and 4.5e from Table 7]

Response: Most of these are not technically feasible and/or low-priority changes that EPA does not foresee addressing given resources. EPA disagrees with 2.2d, which requests fewer search buttons, and 4.1c, which suggests limiting searchable states by EPA Region. More users prefer the more easily located search buttons, and it is not necessary to select a Region when searching by state.

E. Data Management Issues (Not Enforcement or Compliance Related)

E1. Comment: ECHO should provide the ability to search for all facilities owned by a company. ECHO should link facilities to corporate owners. [Addresses comments 4.1a and 4.2p from Table 7]

Response: To help users in the short term, EPA has added a new feature that allows searches based on a list of facility identification numbers. This will allow users who already know the list of facilities owned by a company to perform fast searches within ECHO. Corporate data used internally by EPA is purchased from private vendors under licenses that prevent the redistribution of such information to the public.

E2. Comment: The Facility Registry System has chronic errors and the ECHO reports often show conflicting facility name and address data. [*The Facility Registry System contains a list of facilities with "links" cataloging all relevant environmental interests or permits.*] [Addresses comment 5a.2 from Table 7]

Response: During the public comment period for ECHO, which also presents Facility Registry System (FRS) records, EPA received a total of 1,017 error notifications regarding FRS information. These notifications are related to the 223,739 detailed facility reports that were viewed during ECHO's comment period. Overall, slightly less than 0.5% of the facility records accessed resulted in notifications on FRS data. The facility name and address data shown on the ECHO report are compiled from reports that are made by the regulated entity to EPA or the states. Conflicting information within these databases are normally the result of inconsistent reporting by the regulated entity. These inconsistencies can be corrected by updating the notification sent to the appropriate regulatory authority. In the case of errors to the FRS data shown on the ECHO report (the first line of the report), corrections that are submitted through the error notification process are normally made within five days of verification.

F. Miscellaneous Issues

F1. Comment: EPA should clarify how the planned Security and Exchange Commission (SEC) site relates to ECHO. [Addresses comment 4.6 from Table 7]

Response: EPA does maintain a Web site discussing the obligation of public companies to

disclose certain government sanctions and environmental liabilities to shareholders. The site has a link to ECHO, and thus, does not provide any conflicting information. The site is located at http://www.epa.gov/compliance/incentives/programs/marketbased.html.

F2. Comment: ECHO threatens homeland security by providing names and locations of regulated facilities. [Addresses comments 1.2e, 4.3b, and 4.3c from Table 7]

Response: The ECHO site underwent extensive internal review and assessment before it was released. This review process found no reason that the information on ECHO should be withheld. EPA believes that the ECHO site balances the need to protect sensitive information with maintaining access to the information citizens need to protect their health and environment. Prior to the ECHO site release, EPA also met twice with homeland security officials to ensure the site did not raise potential problems.

F3. Comment: ECHO is not easy to find on the EPA Web site. EPA should provide a better method of publicizing it and making it more prominent. [Addresses comment 4.6 from Table 7]

Response: EPA has modified its search engine to display ECHO when a "keyword" of ECHO is entered into the EPA site. EPA has completed a version of ECHO that will be accessible via the Envirofacts Web site (<u>www.epa.gov/enviro</u>). Because Envirofacts has many users, EPA believes that this will significantly raise the visibility of the ECHO project.

F4. Comment: ECHO should not link to non-government Web sites. [Addresses comment 4.3 from Table 7]

Response: At this point, ECHO does not contain links to non-governmental Web sites. EPA may reevaluate this decision in the future.

G. Enhancement of Content/Function

G1. Comment: Better explanations, acronyms, descriptions, and definitions are needed on the site. [Addresses comments 3.2b, 3.2g, 3.2h, 3.2j, 3.2k, 4.4c, and 4.4d from Table 7]

Response: EPA received many detailed comments relating to the overall functionality and ease of use of the site. In general, EPA agrees that changes can be made to improve the overall usefulness of the site. Because of the complex nature of the data that feeds ECHO, presenting the information in a way that a first-time user can immediately grasp can be difficult. EPA believes that reading the frequently asked questions document, the site caveats, and the data dictionary may be necessary to fully understand the site queries and reports. The ECHO audience has a wide and diverse set of perspectives and experience in relation to environmental enforcement issues. The site must present the level of detail to answer the most demanding questions from expert users, while also providing an easy-to-use site design that does not intimidate novice users. Feedback indicates that the site can benefit from changes to the look, feel, and documentation provided. Many of these changes will be implemented over the next year and will be geared toward making the site easy for new users to understand and providing the level of detail needed to answer the questions of advanced users. User interface improvements will be documented as they become available in the "Recent Additions" section of

the ECHO site. EPA has completed a new "first-time user" screen and has made several design improvements.

G2. Comment: More "plain English" is needed on the site. [Addresses comments 3.2b and 3.2h from Table 7]

Response: As noted above, EPA will add a first-time users button that will provide plain English instructions for using the site. Other specific site changes have already been made to sections of the Web site that were not well understood by users. Over the next year, EPA will also add enhancements to the site including better explanation of acronyms used in reports. In many cases, truncated words or acronyms are needed to allow the reports to fit on a page and be printable. EPA will explore the use of pop-up windows that can help describe terms.

G3. Comment: Some users requested that EPA expand demographics searching options, while some recommended that EPA remove demographic data or explain it better. [Addresses comments 4.1g, 4.2g, 4.3a, and 4.4d from Table 7]

Response: The demographic surroundings of a facility were included in the ECHO project as context for users. In particular, users who study issues of environmental justice need this level of information to draw some context in regard to the government's activities within these areas (e.g., are inspections occurring in areas that may be disadvantaged financially). ECHO allows users to combine enforcement and compliance queries with Census data to answer questions such as "what facilities were inspected near heavily populated, minority areas" or "have facilities been inspected near heavily populated, minority areas." As technology moves toward greater integration and shared services, government Web sites may continue to bring data sets together when need exists for analytic capabilities. EPA has clearly explained on the site that the information from the Census is not directly related to compliance history, but believes that by integrating the information many users can benefit from the analytic capability. EPA plans to continue providing demographics data, but will pay particular attention to ensuring that the information is properly explained on the ECHO site.

G4. Comment: Text modifications (details provided by many commenters) could make the site easier to understand. [Addresses comment 3.2 from Table 7]

Response: EPA has reviewed the comments and has made many substantial changes to the usability of the site. Future changes to the site will be made in keeping with these comments.

G5. Comment: The ECHO site is missing many important Clean Water Act permits that are stored in the Permit Compliance System (PCS). The site should present the full range of permitted facilities (e.g., general, stormwater, concentrated animal feedlots, etc.), rather than just standard direct discharge permits. [Addresses comment 4.2k from Table 7]

Response: The bulk of the compliance data collected by EPA is within the universe of direct discharge facilities. Better compliance and enforcement data about these additional facilities will not be available until after the Permit Compliance System modernization effort is completed.

G6. Comment: The frequency of site updating should be changed. Opinion 1 - the site should be updated less frequently (quarterly). Opinion 2 - the site should be updated more frequently (weekly or bi-weekly). [Addresses comments 1.2f and 5b.2c from Table 7]

Response: EPA agrees that the ECHO site should contain the most recent data. Frequent updates ensure up-to-date information and also allow corrected data errors to flow into the system more quickly. Though EPA would prefer more frequent updates, the Agency plans to continue with the monthly update process due to the existing technical and resource limits under which the program is operating. EPA believes that the monthly update process is adequate, and in fact, many other government databases are only updated quarterly or yearly. Many commenters indicated that site updates every month are responsive to what is needed.

G7. Comment: Queries should be allowed by NPDES parameters. [Addresses comment 4.1b from Table 7]

Response: EPA believes that this suggested enhancement to ECHO would be beneficial (for example, searching for all mercury violations, or for all facilities permitted to release a particular chemical). However, EPA has limited resources for making enhancements to ECHO and thus must balance the anticipated value and cost of one potential enhancement with other potential enhancements. This particular enhancement is likely to be difficult and resource intensive due to the more than 2,000 permutations of NPDES pollutant codes within the database, which would require significant re-programming to group in an understandable way. Thus, EPA does not expect to be able to implement this in the near term. EPA does intend to keep a list of suggested enhancements and will periodically review them to determine which can be implemented in the future.

G8. Comment: EPA should provide a data source map that explains how the information in ECHO is supplied (the origin of all data shown). [Addresses comment 3.2d from Table 7]

Response: The ECHO site does this in several ways, but could be improved. The site explains, in general terms, how information flows from facilities and states to EPA systems. In addition, the ECHO reports show the agency that originated an activity (for example, the report shows whether the EPA or state conducted the inspection, entered the violation, or took an enforcement action). Beyond these existing pointers, EPA plans to develop a flow diagram that explains this information in more detail. This also should help those who had trouble finding the information regarding data sources.

G9. Comment: The ECHO site should link directly to all state sites so that users can research more compliance and enforcement data at the state level. [Addresses comments 3.2l and 4.6 from Table 7]

Response: Prior to the launch of the ECHO pilot, all states were provided with the opportunity to provide such links. Some states have posted links from the ECHO site and do in fact have searchable information. Most states do not provide searchable enforcement and compliance data. EPA will work with the states to ensure that these links are complete, and will encourage states to provide links to their general home pages if a searchable system is not available. ECHO does provide some general links to state information via the Environmental Council of the States

(ECOS) Web site.

G10. Comment: EPA should provide more information on "data completeness" so that users will be alerted to potential problems (e.g., errors of omission - data not flowing into the national system). [Addresses comment 3.2 from Table 7]

Response: ECHO does contain information about data weaknesses from the "Quality of Data" link. However, this information may not be a complete listing of all data quality problems – particularly errors of omission where data has not made it to the national system. Some commenters also said many users will not take the time to click on this page. EPA plans to more closely monitor potential areas where data are incomplete. Caveats will be added to the existing "Quality of Data" document, and EPA is developing plans to add a "missing data" flag that would go on the Detailed Facility Report. This feature would be much more apparent to the data user.

G11. Comment: Indicate how many facilities in a searched state are permitted and provide basic statistics. [Addresses comments 1.2d and 4.6 from Table 7]

Response: Users already can do this by using the individual Clean Air Act, Clean Water Act, or Resource Conservation and Recovery Act queries. Selecting the state and searching provides users with the number of hits (ID numbers or permits). Similarly, this approach can be taken to see how many facilities were inspected within a given period.

G12. Comment: Because the entry of violation data for Clean Water Act "minors" data is not required by EPA, ECHO should indicate which states are providing the information and which are not. [Addresses comments 1.2d and 4.6 from Table 7]

Response: Within the next six months, EPA will develop a table to be posted on the ECHO site that shows which states submit minor facility data versus those that do not. This table will provide information for all three statutes.

G13. Comment: EPA should better explain the lag time it takes for information to enter the databases. [Addresses comments 3.2c and 5b.2c from Table 7]

Response: EPA has added new information about this topic. It is available on the ECHO site by clicking on the monthly "refresh" date, which provides a pop-up screen explaining that the data are not real-time. In addition, this text was added to the FAQ page.

G14. Comment: EPA should include the actual permit limits with the exceedances shown on the Detailed Facility Report. [Addresses comment 4.2d from Table 7]

Response: ECHO provides this capability via a link. The PCS permit number is hyperlinked to EPA's Envirofacts site, which contains the actual limit and measurement data. EPA also will consider providing a listing of "regulated parameters" directly on the Detailed Facility Report. Currently, any parameter that is regulated, but had no violations during two years, is not shown on the Detailed Facility Report.

G15. Comment: ECHO should allow retrievals of all facilities within a state and should not be limited to 500 facilities per return screen. [Addresses comment 4.1c from Table 7]

Response: For a trial period, EPA has raised the query limit to 1,000. EPA limits the number of facilities available through a query for three reasons. First, providing unlimited searching for large numbers of facilities can lock up Internet browsers. Second, providing the ability to run massive queries affects the performance of the system and could possibly delay other Agency business that utilizes the same server. Third, the Office of Enforcement and Compliance Assurance (OECA) is charged by volume of data accessed. Providing unlimited data to all users is not supported by the available budget of the project. EPA will monitor the site to ensure that changing to 1,000 facilities does not significantly slow down the site for users performing smaller queries.

G16. Comment: EPA should link ECHO Detailed Facility Reports to all relevant supporting documents, such as electronic versions of Clean Air and Clean Water permits, Clean Air Act self-certifications, inspection reports, consent decrees, and final enforcement orders. [Addresses comment 4.1f from Table 7]

Response: EPA does not have a national document repository or an automated system that contains these supporting documents. Some efforts are underway to create national electronic repositories of these supporting documents. As these efforts progress, EPA will evaluate creating ECHO links.

G17. Comment: EPA should link state program performance data with the existing facility program performance data. [Addresses comment 4.6 from Table 7]

Response: The ECHO project is focused on providing facility data. At this time, EPA does not envision that the site will expand to provide information about state program performance.

G18. Comment: EPA should provide a guidance document on how to interpret data on the site. [Addresses comments 3.2a and 4.5a from Table 7]

Response: Data interpretation is dependent on how and what the end user wants to learn from the data. However, EPA plans to develop an "interpretive" facility report to help explain the key features of the report and assist users in interpreting the information.

G19. Comment: EPA should provide more information about the Resource Conservation and Recovery Act violation types. [Addresses comment 4.2a from Table 7]

Response: The information provided in ECHO is the most available data that resides in the RCRAInfo system. No additional information is available for Resource Conservation and Recovery Act violation types; however, a document is being developed to provide definitions, which could then be used on ECHO. EPA expects this document to be finalized in fiscal year 2004

G20. Comment: EPA should put much stronger caveats on the reports for California facilities. [Addresses comments 1.2d and 3.2 from Table 7]

Response: EPA agrees that California facility reports are often incomplete and is working on a better way to provide this caveat to the users via a missing data flag.

G21. Comment: The ECHO site should only include major Resource Conservation and Recovery Act facilities. [Addresses comment 4.3 from Table 7]

Response: EPA disagrees with this comment. The public has expressed an interest in the full range of regulated facilities – including smaller facilities.

G22. Comment: ECHO should include better mapping features. [Addresses comments 4.1e, 4.1h, and 4.2n from Table 7]

Response: ECHO provides a link allowing any facility to be mapped. Other projects within EPA, notably the Windows to My Environment Web site, provide the more sophisticated mapping features and will, in the future, incorporate enforcement and compliance data shown in ECHO.

G23. Comment: A mechanism is needed for asking clarifying questions. [Addresses comment 3.2 from Table 7]

Response: ECHO maintains both an e-mailbox (echo@epa.gov) and a hotline for this purpose.

G24. Comment: EPA should modify the Detailed Facility Report to provide only start and ending dates for violations, rather than showing the eight-quarter compliance grid. [Addresses comments 3.2m, 4.4a, and 5a.2a from Table 7]

Response: EPA believes that the eight-quarter format is more clear in terms of providing a visual representation of the last two years of information.

G25. Comment: EPA should hyperlink terms on the Detailed Facility Report to definitions. [Addresses comment 4.1i from Table 7]

Response: The report is already hyperlinked to a data dictionary. EPA is considering additional "pop-up" help for column headings and acronyms used within the report.

G26. Comment: More delineation of severe from non-severe violations is needed. [Addresses comment 3.2i from Table 7]

Response: ECHO provides the maximum amount of data that is collected by EPA about the severity of violations. Within each program (Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act), EPA denotes violations and determines whether these violations are considered "significant." These definitions are provided on the Web site, and are specific to the regulatory program. For example, under the Clean Water Act, toxic limit violations that are 20% over limit are generally considered significant. ECHO shows these violations in bold, red type. Similarly, the site will indicate whether violations determined through Clean Air Act and Resource Conservation and Recovery Act inspections rise to the level of significant. EPA understands that ECHO commenters want more information on violations,

but the ECHO site presents the available information. EPA will consider these comments as data systems and reporting requirements are updated over time. However, broad-scale changes in the way information flows to EPA normally require many years of development.

G27. Comment: ECHO should be more clear that violations are allegations and not facts. A caveat should be added to the ECHO system. [Addresses comment 3.2 from Table 7]

Response: EPA, in keeping with the Freedom of Information Act, provides data to the public relating to compliance and enforcement. This includes the regulatory agency's determination that a violation occurred. Of course, legal options are available to companies that dispute the agency's findings. EPA will provide a stronger caveat on the ECHO Web site that many violations reflect government determinations and are not final findings of fact.

G28. Comment: EPA should distinguish between alleged and resolved violations (e.g., those that are not proven in court, versus those that have been). [Addresses comments 1.2a and 4.2a from Table 7]

Response: EPA does not collect and manage all of the compliance data in this manner, but will evaluate the need for it during data system modernization efforts. Data collection would need to be improved to allow better connection between inspections, violations, and enforcement actions. If this can be achieved, the ECHO reports could show which violations resulted in a formal enforcement action and which did not. This is somewhat possible to do with ECHO now; however, the user does have to make assumptions about these associations (e.g., noting that a violation ended in close sequence to the issuance of an action). Regardless of whether this improved tracking system is developed, EPA believes that information on all violations determined by EPA and states should remain available on the ECHO Web site regardless of the status of enforcement actions. The notable exception is when a violation is found to be erroneous through subsequent discovery or court finding.

G29. Comment: EPA should develop a "compliance rate" that judges the compliance status of a facility based upon the total number of compliance obligations. [Addresses comments 4.2b, 4.2o, and 4.2s from Table 7]

Response: EPA disagrees with this comment for several reasons. First, EPA and the states are not able to continuously monitor all compliance points at a facility. In fact, even when inspections are done, these inspections may look only at some parts of the operation. The discovery of violations by an inspector normally indicates that the problem has been occurring and is not an isolated case that just happened to coincide with the inspector's visit. Given that EPA does not have real-time compliance status information for all points regulated at a facility, we cannot calculate a compliance rate unless a new reporting mechanism was established that allowed facilities to provide up-to-date compliance status information for every regulatory requirement. Absent new reporting requirements, EPA and the states are not in a position to calculate the total violations compared to the total compliance obligations. EPA is willing to engage in discussions with the regulated community about developing new reporting streams that may allow more precise compliance monitoring of all points at a facility. If these discussions turn up any promising reporting streams that could be used, EPA is willing to consider alternative ways to portray compliance data. EPA has been determining statistically

valid non-compliance rates for a set of requirements within selected populations. These rates can only be applied to the population identified and the specific requirements evaluated.

G30. Comment: ECHO should distinguish between noncompliance and return-to-compliance dates. The current approach is confusing, and no clear way exists for the public to know at what time a violation ended. [Addresses comments 3.2m, 4.4a, and 5a.2a from Table 7]

Response: The ECHO Web site does provide this information to some extent; however, each statute operates under a different set of policies regarding the start and completion date of significant noncompliance and high priority violations. Further information on each programmatic policy can be found on EPA's Web site at:

RCRA	http://www.epa.gov/compliance/resources/policies/civil/rcra/erp-mem.pdf
CAA	http://www.epa.gov/compliance/resources/policies/civil/caa/stationary/issue-ta-rpt.pdf
CWA	EPA is working to make this report available electronically

G31. Comment: EPA should show all discharge points, not just those that have violations. [Addresses comments 1.2a and 3.2e from Table 7]

Response: Due to the complexity of many Clean Water Act permits, ECHO only prints the regulated parameters (pollutants) and discharge points that exhibit violations. This is done primarily to reduce the overall length of the report. Users needing more information can link to Envirofacts to get complete information (this is done by clicking on the PCS permit number at the top of the ECHO report). EPA is considering the addition of summary information within the ECHO report that could simply list the additional parameters regulated that did not have violations.

G32. Comment: EPA should remove the quarterly noncompliance status from the Detailed Facility Report. [Addresses comment 3.2f from Table 7]

Response: EPA believes that this section is essential to the report. Many commenters requested more information about violations. Removing this section would further limit the amount of information available.

G33. Comment: ECHO should show the full range of inspections, not just those recognized by EPA. [Addresses comments 1.2b, 3.2e, and 3.2j from Table 7]

Response: EPA has a set of guidelines used with the states for determining whether an inspection is officially "counted." These rules allow EPA to determine which events meet definitions established within each program. The databases do contain additional information in the inspection fields. For example, partial inspections, or "drive-by" surveillance activities can be entered. Some systems also track phone calls made to the facilities in the compliance monitoring fields. EPA has decided to continue using the "official" counts when displaying whether a facility has been inspected because this is the most relevant information; however,

some additional detail is shown on the Detailed Facility Report. These additional compliance monitoring events (that are not "official" inspections) are show in italics type. Other activities within the database are either not relevant, not well populated, or designated as "state-use" only (meaning there is no national definition of the event that could be provided to the public). EPA plans to keep the inspection data as it is, but will look for opportunities to add other voluntary data fields in italics if there is a defined data reporting stream from the states.

G34. Comment: EPA should include notices of violation (informal enforcement actions) in the ECHO site. [Addresses comments 1.2b and 3.2e from Table 7]

Response: EPA agrees that notices of violation are an important aspect of the enforcement program. Many violations are resolved by EPA and the states using these informal actions and thus are not pursued through the administrative or judicial enforcement process (generally, an informal action is an activity taken by EPA or the state to bring a facility back to compliance that is not enforceable in court). Some states have expressed an interest in adding this information so that the public is more informed that some enforcement response did occur. EPA will meet with the states to discuss the addition of this information to ECHO. If an agreement is reached to provide this information, an additional section will be added to the Detailed Facility Report that shows notices of violation that have occurred.

G35. Comment: There is no link between high priority violation/significant noncompliance (HPV/SNC) criteria and the cause for the HPV/SNC listing. [Addresses comments 1.2a and 3.2a from Table 7]

Response: ECHO provides this information in some cases but not all. By interpreting the Detailed Facility Report, the underlying violations are normally expressed in relation to the pollutants in violation (particularly for Clean Air Act and Clean Water Act), or regulatory requirement violated (Resource Conservation and Recovery Act and Clean Air Act). Therefore, the user could identify when the SNC/HPV started, and determine what violations started at the same time. EPA agrees that this is not the optimal way to determine the relationship between SNC/HPV and detailed violation data. As EPA modernizes its systems, this issue will be examined more closely so better connections can be made. EPA also will explore options for expressing existing data in a more user-friendly manner.

G36. Comment: EPA should convert from Standard Industrial Classification (SIC) codes to North American Industry Classification System (NAICS) codes. [Addresses comment 4.6 from Table 7]

Response: EPA systems are in the process of converting to the more comprehensive NAICS classifications. At this time, the completeness and quality of the SIC code data is better. In the short term, ECHO will show the NAICS code data on the Detailed Facility Report. In the long-term, ECHO will offer NAICS searching capabilities when the data set becomes complete.

G37. Comment: Rather than linking to Toxics Release Inventory (TRI) data, the ECHO report should integrate summary TRI data on the ECHO site as earlier Web site pilots have done. [Addresses comment 4.2e from Table 7]

Response: Concerns have been raised that users may misinterpret the TRI data as relating to the compliance status of the facility. For this reason, EPA provides a link to a separate site that is solely designed to provide TRI data. Users interested in the TRI data can use the TRI Explorer located at the http://www.epa.gov/tri Web site.

G38. Comment: The ECHO site is too limited in its two-year scope and should be expanded to at least five years. [Addresses comment 4.2r from Table 7]

Response: EPA is taking steps to increase the time frame shown within the ECHO site. Two steps are planned. First, EPA will add an additional year of data to the site each year over the next three years to eventually bring the site up to five years of data. This enhancement will ensure that all data shown on the site have received a high-level of data quality review. This change includes lengthening the time period on inspections and enforcement action data. EPA may not be able to increase the time period for violations due to underlying systems limitations. EPA anticipates that ECHO will convert to three years of data in early 2004. Second, EPA plans to offer better search tools for federal enforcement cases within EPA's Integrated Compliance Information System (ICIS) data. EPA is working on the design of this system that will let users easily search for federal enforcement cases across all environmental statutes for a period of three years (eventually reaching five years).

G39. Comment: EPA should provide information regarding the environmental results of enforcement actions. [Addresses comment 4.2i from Table 7]

Response: EPA has made significant strides in the last several years to quantify environmental benefits of enforcement cases. Though there is no state reporting of this information to EPA, ECHO users can view pollutant reductions estimated as a result of federal cases. This information is found on the "Enforcement Case Report." The Case Report is viewable via a link from the Detailed Facility Report for any facilities with recent federal enforcement actions. It provides environmental results data for recently concluded enforcement cases, such as the estimated pollutant reductions as a result of the case.

G40. Comment: More details are needed on the type of inspections. [Addresses comments 4.1f and 4.2f from Table 7]

Response: EPA provides the maximum amount of detail contained within federal databases.

G41. Comment: ECHO should provide more information on the receiving waterbody for water discharges. [Addresses comment 4.6 from Table 7]

Response: This information is printed on the detailed facility report. EPA has recently updated the file that allows users to view waterbody and priority watershed information. Several modernization projects being conducted by the Office of Water may provide additional capabilities in the future. As more information becomes available, the ECHO project will consider making enhancements.

G42. Comment: EPA should include information on underground injection wells, aquifers, and recovery wells. [Addresses comments 1.2b and 4.2j from Table 7]

Response: The databases providing information to ECHO do not currently integrate data from these additional programs. EPA will continue to research whether additional information can be added in the future.

G43. Comment: EPA should show voluntary efforts by facilities to reduce emissions. [Addresses comments 1.2b and 4.2c from Table 7]

Response: The EPA Web site contains many resources that allow users to view such efforts. ECHO is designed to provide information concerning enforcement and compliance, which are different from voluntary efforts to reduce emissions.

G44. Comment: EPA should include enforcement case referrals in the ECHO site. [Addresses comments 3.2e and 4.6 from Table 7]

Response: Under current EPA policy, and the Freedom of Information Act, referrals from a state to EPA or from EPA to the Department of Justice are classified as enforcement sensitive. These documents are exempt from public disclosure and thus are not eligible for inclusion in ECHO.

G45. Comment: EPA should provide exceedances for the Clean Air Act (e.g., excess emissions reports, percent over limit). [Addresses comment 4.2c from Table 7]

Response: With some narrow exceptions, EPA does not require real-time compliance monitoring for permitted Clean Air Act sources. Therefore, there is no mechanism that would allow EPA to provide "over limit" data on par with what is provided for Clean Water Act major dischargers. If EPA is aware that facilities are in violation of emissions limits, these violations will note the chemical name on the ECHO detailed facility report. EPA does not have an electronic collection system for excess emissions reports. However, these reports are reviewed by EPA and states and often form the basis for compliance data shown in ECHO. Also, most EPA regions and states maintain these documents in hard copy files.

G46. Comment: More details are needed on the causes of violations, and whether those violations may affect local communities. [Addresses comment 4.2a from Table 7]

Response: Although additional information may reside at the state/local level, EPA does not collect this level of detail in its national data systems, and so has no way to provide this information in ECHO.

G47. Comment: Provide the date of permit renewal applications. [Addresses comment 4.1f from Table 7]

Response: EPA has evaluated the data on permit renewal applications for the Clean Water Act and does not believe that the data quality is high enough to warrant inclusion in ECHO. Many regions and states are not routinely entering this information, and posting the data would make it appear that renewals have not been submitted when they have. EPA will add a caveat to the Detailed Facility Report indicating that expired permits are normally administratively extended when a backlog exists within a state.

G48. Comment: The regulatory citation should be provided in the violations area of the Detailed Facility Report. [Addresses comments 3.2 and 4.2a from Table 7]

Response: This information generally is not collected in EPA systems. However, the site does show the regulatory citation for federal enforcement actions within the ECHO Enforcement Case Report, when available.

G49. Comment: ECHO should provide comprehensive data for all statutes, not just Clean Air Act, Clean Water Act, and Resource Conservation and Recovery Act. [Addresses comments 1.2b and 4.2j from Table 7]

Response: Violation data is available within ECHO primarily for the three programs. However, enforcement data for federal cases are shown for all environmental statutes. The EPA/State workgroup agreed to make available Clean Air Act, Clean Water Act, and Resource Conservation and Recovery Act data only. EPA does not have other system data that are ready to be added to ECHO. However, several system modernization efforts may lead to a wider coverage of statutes in the future. In addition, EPA will discuss with states the possibility of adding other databases into ECHO.

G50. Comment: EPA should show which facilities have reported chemical spills. [Addresses comments 1.2b and 4.2j from Table 7]

Response: This information is already searchable on the National Response Center's Internet site (http://www.nrc.uscg.mil/foia.html). EPA does not integrate spill reports to the Facility Registry System (FRS), so it is not possible for ECHO to provide an automated list of spills that are attributed to ECHO facilities.

G51. Comment: ECHO should include more pollutant release data. [Addresses comments 1.2b, 4.2c, and 4.2j from Table 7]

Response: ECHO plans to focus development efforts on compliance and enforcement data, but will examine other sites that can be linked. EPA's Web sites offer a wide variety of data access points for pollutant release information.

G52. Comment: For the Clean Water Act, ECHO should show actual exceedances rather than the percent over limit (so that users would know whether the percent over is a large amount). [Addresses comments 1.2a and 4.2d from Table 7]

Response: ECHO links to the permit limit data, so a user may compare the ECHO exceedance percentages with the limit amount. This is not an automated system, and EPA agrees improvements could be made to provide more context to the percentages. EPA will evaluate the costs and feasibility of upgrading the report to provide this information.

G53. Comment: ECHO should include data on violations at all Clean Water Act sources, not only major facilities. [Addresses comment 4.2m from Table 7]

Response: Pursuant to existing data management agreements with the states, Discharge

Monitoring Reports need only be reported to the national systems for major sources. ECHO does provide violation data for minor facilities within states that voluntarily enter the data into PCS. EPA is taking several steps to increase the amount of violation data coming to the national system. Under the current data entry system, states manually input data that is submitted in hard copy by the permitted facilities. For future use, EPA is developing an electronic data exchange that will change the way the information is collected. Rather than using a manual data entry process, facilities would submit their information electronically. Once this system is available, a much greater amount of discharge data will flow into EPA's systems – thus increasing the violation data available through ECHO.

Consistent with components of the EPA/State National Environmental Information Exchange Network, the OECA modernized systems will interface with the Agency's Central Data Exchange system (CDX), the Agency Exchange Network Node. OECA system modernization efforts will be developed in line with the Network components to include:

- Technical Infrastructure Standard browser and security protocols are being used in ICIS
 Phase I (implemented in June 2002) and will continue to be used in Phase II ICISNPDES Permit Compliance System (PCS) Modernization.
- Data Standards State/EPA data standards (e.g., Enforcement and Compliance Data Standards); and EPA-only (e.g., facility identification) data standards are addressed in the PCS Modernization effort.
- Data Exchange Templates Extensible Markup Language (XML) schema (modified and expanded PCS CDX Interim Data Exchange Format (IDEF) XML schema) developed for flowing of NPDES data from state systems to PCS.
- Trading Partner Agreements The first step to developing this Agreement is the identification of the required data to be flowed from state systems to the EPA national systems. These data elements were identified in the PCS Modernization NPDES Data Requirement effort in 2002 and are incorporated in the Detailed Design document.

7. Future Project Direction and Next Steps

EPA appreciates the interest level and comments that were received on the ECHO project. The release and display of such a large amount of information is a challenging task, and EPA takes the comments and suggestions very seriously. In summary, EPA has determined that the level of interest in the site is high and that the public has clearly indicated a need for Internet access to compliance and enforcement data. The overall response to the site was favorable, with public interest advocates supporting the project while asking for more information. Members of the regulated community typically asked for modifications, better data quality, and proper context. Most commenters from the regulated community agreed with posting compliance data on the Internet, but provided suggestions on how the approach taken within ECHO could be improved. The level of data errors for violation data has been very low in relation to the number of site queries and number of facilities. While 100% accuracy may not be attainable with such a large database, EPA believes that the ECHO pilot period sufficiently demonstrated that a very high data quality standard is being met. EPA has built an infrastructure to quickly handle errors that are identified by site users, and is now in the process of determining what steps can be taken to better indicate where data are missing from the system.

In regard to ECHO changes as a result of the public comment process, some have been made already, others are now under development, and others will require long-term policy, budget, and technological shifts that first require agreements with the states. EPA is developing an internal process to follow-through on the comments as noted in the previous section of this report, and plans to take several steps to notify users of the status of these changes. First, EPA will begin notifying all ECHO subscribers of important changes as they are completed. This information will also be posted within the "Recent Additions" site link. Second, EPA will provide a one-year status report updating developments that relate to the comment responses above. This status report will expand on the responses above and provide updated information about the status of potential site changes. As noted, the long-term changes that have an impact on state data flow or workload will be discussed in detail with representatives from the Environmental Council of the States. EPA will develop an agreement with the states on all the items so noted in the responses above, and will provide additional information about potential ECHO changes that arise out of these agreements. Finally, EPA will continue to accept comments and suggestions about the ECHO site at the echo@epa.gov mailbox. Users who are interested in providing additional information or comment may continue using that site feature.