

# IDEA/AFS Data Download

The Integrated Data for Enforcement Analysis (IDEA) system incorporates data from the AIRS Facility Subsystem (AFS). AFS is a component of the Aerometric Information Retrieval System (AIRS). Air programs tracked in AFS include :

- National Emissions Standards for Hazardous Air Pollutants (NESHAP)
- State Implementation Plans (SIP)
- Standards of Performance for New Stationary Sources (NSPS)
- Prevention of Significant Deterioration (PSD)
- New Source Review (NSR)

## 1. AFS DESCRIPTION

AIRS is a database management system for airborne pollution in the United States. It consists of four subsystems, each addressing a different (but in many cases related) aspect of the Clean Air Act regulatory requirements. AFS is the subsystem which contains emissions, compliance, and enforcement data on stationary sources of air pollution. Regulated sources cover a wide spectrum; from large industrial facilities to relatively small operations such as dry cleaners (automobiles and other mobile air pollution sources are tracked by a different AIRS Subsystem called AMS). IDEA's AFS file currently does not contain any data on facilities that are solely asbestos demolition and/or renovation contractors, or landfills. IDEA does include data on non-federally reportable facilities, including facilities that are planned, under construction, operate seasonally, temporarily shut down, and shut down.

While AFS maintains data at several levels of detail on an air source, IDEA focuses on the data at the plant level. Plant-level data treats the entire facility as one unit rather than looking at individual emission points, processes, or stacks. Data reported at the plant level include:

- General source Information—identification number, name.
- Significant Violator Information.
- Air Program Information—a repeating block of data addressing each regulatory area that a facility is subject to (e.g., SIP, NSPS, NESHAP, PSD). Each Air program offers data on the following:
  - Historical Compliance Status (quarterly —1992 to present)
  - Action/Activity Data (inspections, enforcement actions, etc.—1978 to present)
  - Operating Status

Only certain data elements from AFS are incorporated into IDEA. This document contains the AFS Data Element table as well as definitions of the AFS data elements in IDEA download query. The AFS data element table in Section 2 presents the AFS data elements by table, parallel to the data's hierarchical relationships in IDEA. Section 3, *AFS Data Element Definitions* lists each AFS data element present in the IDEA download in alphabetical order.

## **2. AFS DATA DOWNLOAD FILE STRUCTURE**

The AFS data download excludes all facilities that are NOT Federally Reportable, and contains data on any AFS facility within IDEA with one of the following Inspection codes:

- 1A - EPA inspection—level 2 or greater
- 1B - 113 (D) (4) Innov. Tech. Order approved/issued
- 1D - State criminal referral
- 1E - Civil referral to state attorney
- 2A - EPA source test conducted
- 2D - State court consent decree
- 3A - Owner/operator-conducted source test
- 4B - EPA civil referral
- 5B - EPA criminal action
- 5C - State inspection—level 2 or greater
- 6B - EPA court consent decree
- 6C - State source test conducted
- 7A - Notice of noncompliance (Section 120)
- 7E - EPA 167 order
- 7F - 113D APO complaint filed
- 8A - EPA 113 (A) order issued
- 8C - State administrative order issued
- 9A - 113(D) delayed compliance order approved/issued
- 9C - State civil action
- FE - EPA conducted FCE/On-Site
- FF - State conducted FCE/Off-Site
- FS - State conducted FCE/On-Site
- FZ - EPA conducted FCE/Off-Site
- TO - EPA required (Owner/Operator conducted) stack test/observed & reviewed.

Element Name	Data Type	Length	Name
<b>PLANT LEVEL</b>			
AFSID	Char	10	AFS Identifier: State-County-Plant Number
PNME	Char	26	Plant Name
STRT	Char	30	Plant Street Address
CYNM	Char	30	Plant City
STAB	Char	2	State Abbreviation
ZIPC	Char	9	Zip Code
HPV	Char	1	Current High Priority Violator
SIC1	Num	4	Primary SIC Code
SIC2	Num	4	Secondary SIC Code
NIC1	Num	6	NAIC Code
VIOLQTR	Num	2	# Quarters in Violation—last 2 years
INSPDAY	Num	5	Days Since Last Inspection
FEDREP	Char	1	Federally Reportable? (Y/N)
OPST	Char	1	Operating Status
DCL1	Char	2	EPA Classification Code
<b>INSPECTIONS AND ENFORCEMENT ACTIONS</b>			
DTA1	Date	7	Date Achieved (YYMMDD)
APC1	Num	4	Air Program Code
ANT1	Char	2	National Action Type
RPAM1	Num	7	Penalty Amount (in thousands of dollars)

### 3. AFS Data Element Definitions

The following is a list of all AFS data elements and AFS-derived elements that appear in the IDEA download. The data elements are listed alphabetically by data element name.

**AFSID** (AFS Identifier) A ten-character alphanumeric code which uniquely identifies each permitted plant. A combination of the state code, the county code and the unique AFS plant ID compose the AFSID.

**ANT1** (National Action Type) A two-character code identifying a compliance activity. The National Action Type field translates region-specific action type codes to the corresponding EPA Region compliance activity code. Valid National Action Type values for ANT1 include:

CB = Title V ann compl cert due/rcv by permit authority	2D = State court consent decree
CC = Title V compliance cert due/received by EPA	2E = State day zero
C1 = 113 Conference	2F = State day 120
C2 = 113 (D) APO recalculated	2G = Contractor de-listing
C3 = 113D Pen collected	2H = AHEARA certification
C4 = Final Compliance	2I = AHEARA de-certification
C5= Order/decree expires	2J = Notification received
C6 = Amendment	2K = Compl. by state, no action required
C7 = Close-out memo issued	2L = Proposed SIP revision will lead to
C8 = Decree lodged	2M = Proposed SIP/FIP revision will lead to
DB = Lead changed to shared enforcement	2T = Federal day 150 (previous to 10/92 day)
DS = Lead changed to state enforcement	2U = Day Zero – Enforcement Lead Unassigned
DY = SV lead changed	2Z = Federal day zero
EC = EPA investigation conducted	3A = Owner/operator-conducted source test
EI = EPA investigation started	3C = New source commence construction
ER = Compliance certification EPA review	3D = State civil penalty assessed
ES = EPA PCE/On-Site	3E = Warning notification violation
EX = EPA PCE/Off-Site	3F = Warning substantive violation
FE=EPA Conducted FCE/On-Site	4A = NESHAP waiver of compliance issued
FF = State Conducted FCE/Off-Site	4B = EPA civil referral
FS = State Conducted FCE/On-Site	4C = New source start-up
FZ = EPA Conducted FCE/Off-Site	4D = State noncompliance penalty assessed
HR = 113D Hearing	4E = Civil referral notification by EPA
NA = MACT non-applicability determination	4F = Administrative order notification deficiency by
NH = Day Zero for non-federally reportable violation	4G = Civil referral notification deficiency
OT = Other addressing action	4H = Administrative order substantive
PS = State PCE/On-Site	4I = Civil referral substantive violation by
PT = Performance Track facility	4J = Administrative order substantive violation by
PX = State PCE/Off-Site	4K = Civil referral substantive violation by
RT = SV reported as addressed	4L = EPA pre-NOV letter sent

RV = SV deleted	5A = EA pre-NOV letter sent
SE = 113D Settlement	5B = EPA criminal action
SI = State Investigation Started	5C = State inspection—level 2 or greater
SR = Compliance certification state review	5D = State PSD applicability determination
TE = EPA req (O/O cond) Stack Test/not obsv but revwd	6A = EPA NOV issued
TO = EPA req (O/O cond) Stack Test observed	6B = EPA court consent decree
TR = State req (O/O cond) Stack Test/not obsv but revwd	6C = State source test conducted
UB = 113D UNMIT EC BEN	6D = State PSD application complete
UC = 113D UNMIT GRAV COMP	7A = Notice of noncompliance (Section 120)
US = 113D Total UNMIT PEN	7B = EPA civil penalty assessed
VE = SV reported as added	7C = State NOV issued
VF = State Day 150 (Formerly 120)	7D = State PSD permit issued
VL = SV reported as added	7E = EPA 167 order
VR = Violation resolved	7F = 113D APO complaint filed
WD = 113D Withdrawn	7G = Compl. by EPA, no act on required
1A = EPA inspection—level 2 or greater	8A = EPA 113 (A) order issued
1B = 113 (D) (4) Innov. Tech. Order approved/issued	8B = 113(D) penalty order filled
1C = EPA PSD application complete	8C = State administrative order issued
1D = State criminal referral	8D = Offset applicability determination
1E = Civil referral to state attorney	9A = 113(D) delayed compliance order approved/issued
1F = Contractor listing	9B = EPA PSD applicability determination
2A = EPA source test conducted	9C = State civil action
2B = Day Zero-Shared Enforcement Lead	9D = Offset permit issued
2C = EPA PSD permit issued	9Z = SVIL determination

APC1 (Air Program Code) A one-character code used to identify 1) the regulatory air program(s) that applies to a particular plant or point, and 2) the regulatory air program(s) authorizing and associated with an action taken by a local, state or federal regulatory agency. Air Program Code values include:

- A = Acid Precipitation
- I = Native American
- M = MACT (Section 63 NESHAPS)
- V = Title V Permits
- 0 = SIP Source
- 1 = SIP Source under federal jurisdiction
- 3 = Non-Federally Reportable Source
- 4 = CFC Tracking
- 6 = PSD
- 7 = NSR
- 8 = NESHAP
- 9 = NSPS

CYNM (Plant City Name) Field containing the name of the city or town where the plant is located.

DCH1 (Historical EPA Plant Compliance Status) A one-character code reflecting EPA's determination of compliance for a facility (or point within a facility) with regard to pollutants regulated by an Air program or by the procedural requirements of a permit. In the absence of an EPA value, this element displays the state value.

There are four compliance categories: In Compliance, Out of Compliance, On Schedule, and Unknown Compliance. AFS compares values entered at the plant program pollutant level to determine the most serious compliance violations. AFS displays these values at the plant Air program level. AFS, in turn, displays the most serious Air program values at the plant general level. Point level data is not evaluated for the purpose of determining worst case scenarios.

Valid EPA Compliance Status codes for the plant/source level (DCS1), air program level (DCA1), pollutant level (DCAP), as well as for the historic plant compliance fields (DCH1 and HDCS1) include:

**Out of Compliance**

B = In violation with regard to both emissions and procedural compliance

1 = In violation—no schedule

6 = In violation—not meeting schedule

W = In violation with regard to procedural compliance

**Unknown Compliance**

Y = Unknown with regard to both emissions and procedural compliance

0 = Unknown compliance status

A = Unknown with regard to procedural compliance

7 = In violation—unknown with regard to schedule

**On Schedule**

5 = Meeting compliance schedule

**In Compliance**

C = In compliance with procedural requirements

4 = In compliance—certification

3 = In compliance—inspection

M = In compliance—CEMS

2 = In compliance—source test

8 = No applicable state regulation

9 = In compliance—shut down

P = Present, see other program(s)

DCL1 (EPA Classification Code) A two-character code that categorizes plants according to the Alabama Power Decision's definition of a Major Source, or the 1993 EPA Compliance Monitoring Branch Classification Guidance. If there is no EPA Classification Code present, then this field displays the State Classification Code value. AFS generates a plant classification reflecting the highest emission level classification of criteria pollutants regulated by an Air program. DCL1 reflects the EPA Classification Code at the general plant level. Valid EPA Classification codes for the plant/source level (DCL1), the pollutant level (DCLP) and the air program level (DLA1) include:

- A** Actual or potential emissions are above the applicable major source thresholds.
- A1** Actual or potential controlled emissions >100 tons/year as per Alabama Power Decision.
- E1** Unregulated pollutant actual or potential controlled emissions >100 tons/year as per Alabama Power Decision.
- SM** Potential emissions are below all applicable Major Source enforceable regulations or limitations.
- A2** Actual emissions <100 tons/year, but potential uncontrolled emissions >100 tons/year.
- E2** Unregulated pollutant actual emission <100 tons/year.
- B** Potential uncontrolled emissions <100 tons/year
- ND** Major Source thresholds are not defined.
- C** Class is unknown.
- UK** Unknown.

**DPAM1** (Penalty Amount) Field that indicates the amount of the civil penalty assessed against a facility in the final agreement between the enforcement authority and the plant.

**DTA1** (Date Achieved) A six-digit field that indicates the date (YYMMDD) of a completed compliance action.

**FEDREP** (Federally Reportable) Under the CAA, federally reportable permits include majors, synthetic minors, NESHAP minors, and other minors in High Priority Violation (HPV), or with recent enforcement actions. The Clean Air Act requires the Air Facility System (AFS) to track all federally reportable sources. IDEA generates the Federally Reportable indicator. FEDREP displays a “Y” if the facility is federally reportable and a “N” if the facility is not federally reportable. A facility is federally reportable if:

AFS.DCL1 = A, A1, A2, SM  
OR  
AFS.APC1 = 8, 9 and AFS.DCS1 is not equal to 8.

**HSV11** (Historical Significant Violator Flag) The Historical Significant Violator Flag is an IDEA-generated element. It displays the archived Significant Violator Flag (SVI1). The Historical Significant Violator Flag reflects the source status on the day that IDEA refreshed its data from AFS (HMONTH). Valid Significant Violator Flag codes for SVI1, SVI2, SVI3, SVI4 and HSV11 include:

<b>Code</b>	<b>Description</b>
E	Violation has not yet been addressed, EPA has lead enforcement
S	Violation has not yet been addressed, state/local has lead enforcement
B	Violation has not yet been addressed, EPA/state shared enforcement

X	Violation has not yet been addressed, lead enforcement not determined.
C	The facility has progressed from an unaddressed significant violation to a compliance schedule; EPA/state share enforcement. (Source w/SVIL=B that changed Compliance Status Code from 1 or 6 to 5, 7, or 0.)
D	The facility has progressed from an unaddressed significant violation to compliance via inspection, source test, certification, facility shut down, or no applicable state regulation; EPA/state share enforcement. (Source w/SVIL=B that changed Compliance Status Code from 1 or 6 to 2, 3, 4, 8, or 9.)
F	The facility has progressed from an unaddressed significant violation to a compliance schedule; EPA has lead enforcement. (Source w/SVIL=E that changed Compliance Status Code from 1 or 6 to 5, 7, or 0.)
G	The facility has progressed from an unaddressed significant violation to compliance via inspection, source test, certification, facility shut down, or no applicable state regulation; EPA has lead enforcement. (Source w/SVIL=E that changed Compliance Status Code from 1 or 6 to 2, 3, 4, 8, or 9.)
T	The facility has progressed from an unaddressed significant violation to a compliance schedule; state has lead enforcement. (Source w/SVIL=S that changed Compliance Status Code from 1 or 6 to 5, 7, or 0.)
U	The facility has progressed from an unaddressed significant violation to compliance via inspection, source test, certification, facility shut down, or no applicable state regulation; state has lead enforcement. (Source w/SVIL=S that changed Compliance Status Code from 1 or 6 to 2, 3, 4, 8, or 9.)
H	EPA (lead) resolved in a prior fiscal year
P	Both (lead) resolved in a prior fiscal year.
V	State (lead) resolved in a prior fiscal year.

OPST (Operating Status) A one-character code representing the operational condition of the plant. The operating status for a plant is generated from the most significant operative value assigned to subordinate Air programs. Valid Operating Status codes, in order of least to most significant operative value, include:

- X = Permanently closed
- P = Planned Facility
- C = Under construction
- T = Temporarily closed
- I = Seasonal
- O = Operating

PAM1 (Penalty Amount) Indicates the amount of the civil penalty assessed against a facility in the final agreement between the enforcement authority and the plant.

PNME (Plant Name) The name associated with a plant at a given location.

RDTA1 (Date Achieved) Field that indicates the date (YYMMDD) of a completed compliance action. Duplicate dates in this field have been “rolled up” and eliminated by IDEA to avoid double counting.

RPAM1 (Penalty Amount) Field that indicates the amount of the civil penalty assessed against a facility in the final agreement between the enforcement authority and the plant. Duplicate penalty amounts in this field have been “rolled up” and eliminated by IDEA to avoid double counting.

SIC1 (Primary SIC Code) The *Primary SIC Code* is the four-character Standard Industrial Classification code that classifies the main product produced or service performed at the plant.

SIC2 (Secondary SIC Code) The Secondary SIC Code is the four-character Standard Industrial Classification code that classifies a product produced or service performed at the plant that is other than the one described by the Primary SIC Code (SIC1).

STAB (State Code) Two-character postal abbreviation code to identify the state where the plant is located.

STRT (Plant Street Address) Field that indicates the street address for the physical location of the plant.

VIOLQTR (Number of Quarters in Violation—last two years) IDEA generates the Number of Quarters in Violation using HDT1 and DCH1. A quarter is any of the following 3-month calendar periods: January-March, April-June, July-September, or October-December. VIOLQTR displays the number of quarters in which a facility was noncompliant in at least one air program in the last two years. Possible values include 0, 1, 2, 3, 4, 5, 6, 7, and 8.

ZIPC (Zip Code) Field that contains the five or nine-digit zip code for the plant address.