

National Inventory Format

NIF3 Methodology & Visual Display

Phase 2 Fire Emission Inventory
WRAP – FEJF

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Salt Lake City, Utah



AIR SCIENCES INC.

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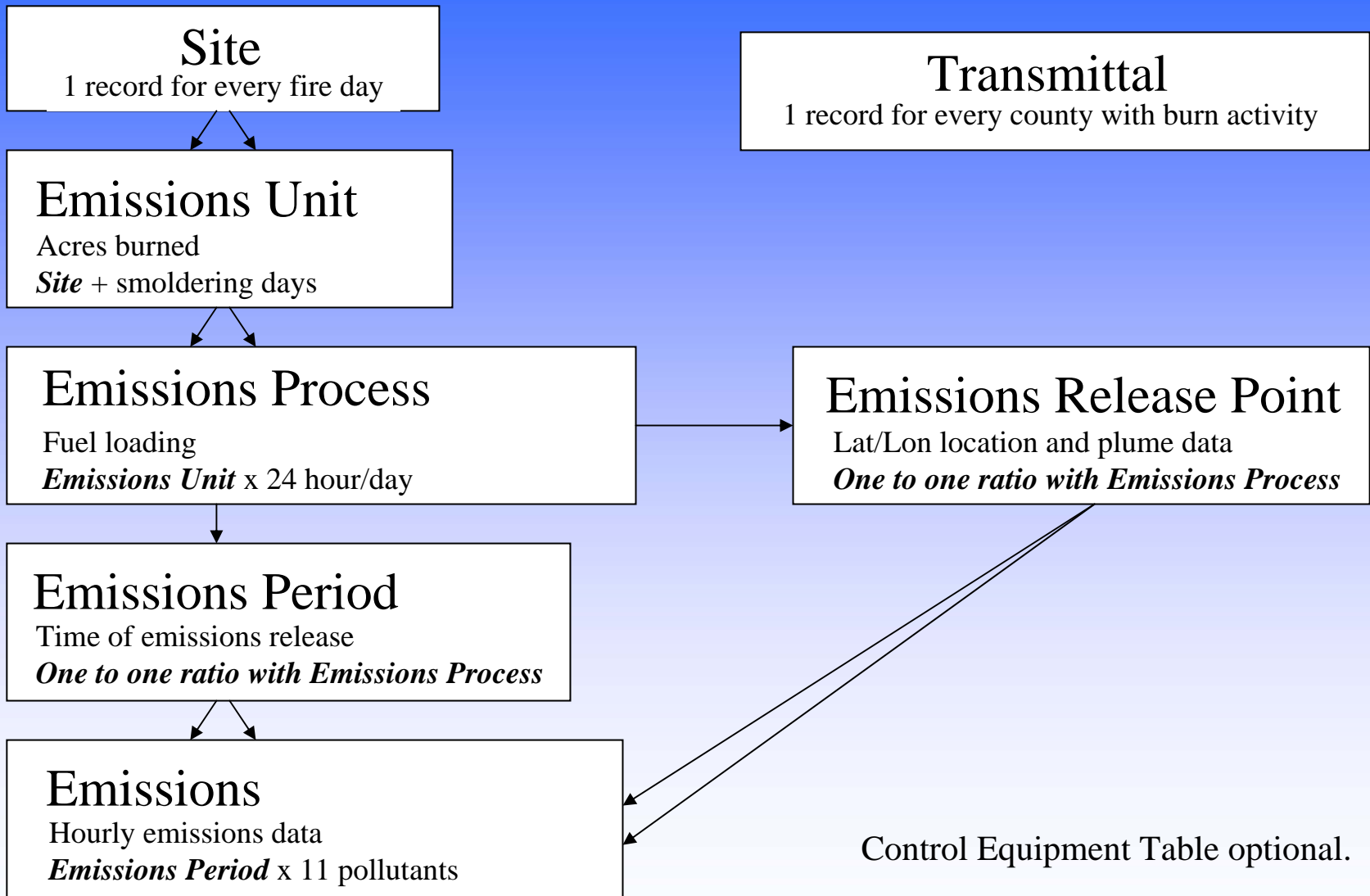
Overview of NIF Format

- WRAP fire data formatted into NIF 3.0 point source format
 - Designed to be submitted to EPA NEI and WRAP EDMS
- NIF point source format consists of 8 tables
- Tables and fields adapted for fire use with LADCO style (EC/R) used as a reference
- Retains plume characteristics
- Documentation of fields and codes used for fire

Steps Taken to Adapt NIF Format to Fire Data

- Obtained NIF definitions and example data from EC/R
- Point Source data fields adapted to present Fire data
 - e.g. Plume Data reported in “Stack Parameter” NIF fields
- Extended EC/R format to ensure Fire data could pass EPA’s NIF 3.0 QC Tool
 - Filled mandatory fields
 - Aligned table relationships according to NIF 3.0

NIF Table Relationships



General Technique for NIF Exporting

- Extract pertinent WRAP EI fields
- Custom script for data parsing and manipulation
 - Format data
 - Allocate data temporally/spatially (e.g. plume data, 24 hours a day)
- Export fixed width text files in NIF 3.0 Format

Example of Conversion to NIF 3.0

WRAP Data	NIF Field	NIF Value
5.0 Tons/Acre (Fuel loading)	Factor Numeric	5.0
	Numerator	TON
	Denominator	ACRE

WRAP Data	NIF Field	NIF Value
[none]	Release Point Type	“Vertical w/ Rain Cap”

Example of Emissions Record

Record Type	FIPS	AIRSCI ID	Smolder?	Hour	Pollutant	Flame & Hour	StartDate	End Date	Time Start
EM	56013	3054	F	H1	PM10-PRI	F H1	020822	020822	0000
EM	56013	3054	F	H1	PM25-PRI	F H1	020822	020822	0000
EM	56013	3054	F	H1	CH4	F H1	020822	020822	0000
EM	56013	3054	F	H1	CO	F H1	020822	020822	0000
EM	56013	3054	F	H1	PM-PRI	F H1	020822	020822	0000
EM	56013	3054	F	H1	NOX	F H1	020822	020822	0000
EM	56013	3054	F	H1	SO2	F H1	020822	020822	0000

Time End	Emissions	EM Unit	Period	EF	NUM	DENOM	Input Material	In vs Out	Submittal
0059	0.0021676	TON	30	28.1	LB	TON	936 I	A	
0059	0.0018590	TON	30	24.1	LB	TON	936 I	A	
0059	0.0010491	TON	30	13.6	LB	TON	936 I	A	
0059	0.0222932	TON	30	289	LB	TON	936 I	A	
0059	0.0026304	TON	30	34.1	LB	TON	936 I	A	
0059	0.0004783	TON	30	6.2	LB	TON	936 I	A	
0059	0.0001311	TON	30	1.7	LB	TON	936 I	A	