

Appendix O
General Conformity
Determination

**BBA Mitigation Project
GBRPC Mitigation Site
Scraping, Grading, Degrading, Demolishing, & Planting
East Baton Rouge Parish, Louisiana**

**Table 1
Combustible Emissions**

Assumptions for Combustible Emissions					
Type of Construction Equipment	Number of Units	HP Rated	Hrs/day	Days/yr	Total hp-hrs
Diesel Bull Dozer	1	160	10	15	24000
Diesel Grader	2	275	10	15	82500
Diesel Excavator	2	300	10	15	90000
Diesel Loader	1	150	10	15	22500
Diesel Dump Trucks	12	310	10	15	558000
Diesel Water Truck	1	225	8	12	21600
Diesel Refrigeration Truck	1	110	10	8	8800

**Table 2
Emission Factors**

Type of Construction Equipment	VOC g/hp-hr	NOx g/hp-hr	VOC lbs/hp-hr	NOx lbs/hp-hr
Diesel Bull Dozer	0.338	5.652	0.0007436	0.0124344
Diesel Grader	0.309	5.577	0.0006798	0.0122694
Diesel Excavator	0.309	5.577	0.0006798	0.0122694
Diesel Loader	0.338	5.652	0.0007436	0.0124344
Diesel Dump Trucks	0.203	6.015	0.0004466	0.0132330
Diesel Water Truck	0.309	5.577	0.0006798	0.0122694
Diesel Refrigeration Truck	0.338	5.652	0.0007436	0.0124344

Convert grams to pounds: (g)x(.0022) = lbs

Emission Factors derived from the EPA's Exhaust and Crankcase Emission Factors for Nonroad Engine Modeling -- Compression-Ignition, July 2010

Conformity Determination Cont'd

**BBA Mitigation Project
GBRPC Mitigation Site
Scraping, Grading, Degrading, Demolishing, & Planting
East Baton Rouge Parish, Louisiana**

Table 3
Annual VOC and NOx Emissions Totals

Total Calculated Emissions		
Type of Construction Equipment	VOC tons/yr	NOx tons/yr
Diesel Bull Dozer	0.00892	0.14921
Diesel Grader	0.02804	0.50611
Diesel Excavator	0.03059	0.55212
Diesel Loader	0.00837	0.13989
Diesel Dump Trucks	0.12460	3.69201
Diesel Water Truck	0.00734	0.13251
Diesel Refrigeration Truck	0.00327	0.05471
TOTALS	0.21114	5.22656

Emissions Formula: $(\text{lbs}/\text{hp}\text{-hr}) \times (\text{hp}) \times (\text{hr}) \times (\text{days}) \times (\# \text{ of units}) / 2000 = \text{Tons}/\text{yr}$

NOTE: The listed equipment is the type and number of equipment that may typically be used at a levee stabilization project.

**BBA Mitigation Project
Gravity Mitigation Site
Scraping, Grading, & Planting
Ascension Parish, Louisiana**

**Table 1
Combustible Emissions**

Assumptions for Combustible Emissions					
Type of Construction Equipment	Number of Units	HP Rated	Hrs/day	Days/yr	Total hp-hrs
Diesel Bull Dozer	2	160	10	65	208000
Diesel Grader	2	275	10	65	357500
Diesel Excavator	2	300	10	65	390000
Diesel Loader	1	150	10	55	82500
Diesel Dump Trucks	10	310	10	45	1395000
Diesel Water Truck	1	225	10	65	146250
Diesel Refrigeration Truck	1	110	10	25	27500

**Table 2
Emission Factors**

Type of Construction Equipment	VOC g/hp-hr	NOx g/hp-hr	VOC lbs/hp-hr	NOx lbs/hp-hr
Diesel Bull Dozer	0.338	5.652	0.0007436	0.0124344
Diesel Grader	0.309	5.577	0.0006798	0.0122694
Diesel Excavator	0.309	5.577	0.0006798	0.0122694
Diesel Loader	0.338	5.652	0.0007436	0.0124344
Diesel Dump Trucks	0.203	6.015	0.0004466	0.0132330
Diesel Water Truck	0.309	5.577	0.0006798	0.0122694
Diesel Refrigeration Truck	0.338	5.652	0.0007436	0.0124344

Convert grams to pounds: (g)x(.0022) = lbs

Emission Factors derived from the EPA's Exhaust and Crankcase Emission Factors for Nonroad Engine Modeling -- Compression-Ignition, July 2010

Conformity Determination Cont'd

**BBA Mitigation Project
Gravity Mitigation Site
Scraping, Grading, & Planting
Ascension Parish, Louisiana**

Table 3
Annual VOC and NOx Emissions Totals

Total Calculated Emissions		
Type of Construction Equipment	VOC tons/yr	NOx tons/yr
Diesel Bull Dozer	0.07733	1.29318
Diesel Grader	0.12151	2.19316
Diesel Excavator	0.13256	2.39253
Diesel Loader	0.03067	0.51292
Diesel Dump Trucks	0.31150	9.23002
Diesel Water Truck	0.04971	0.89720
Diesel Refrigerator Truck	0.01022	0.17097
TOTALS	0.73352	16.68998

Emissions Formula: $(\text{lbs}/\text{hp}\text{-hr}) \times (\text{hp}) \times (\text{hr}) \times (\text{days}) \times (\# \text{ of units}) / 2000 = \text{Tons}/\text{yr}$

NOTE: The listed equipment is the type and number of equipment that may typically be used at a levee stabilization project.

**BBA Mitigation Project
Ascension SB Mitigation Site
Scraping, Grading, & Planting
Ascension Parish, Louisiana**

**Table 1
Combustible Emissions**

Assumptions for Combustible Emissions					
Type of Construction Equipment	Number of Units	HP Rated	Hrs/day	Days/yr	Total hp-hrs
Diesel Bull Dozer	1	160	10	10	16000
Diesel Grader	1	275	10	10	27500
Diesel Refrigeration Truck	1	110	10	6	6600
Diesel Water Truck	1	250	6	10	15000

**Table 2
Emission Factors**

Type of Construction Equipment	VOC g/hp-hr	NOx g/hp-hr	VOC lbs/hp-hr	NOx lbs/hp-hr
Diesel Bull Dozer	0.338	5.652	0.0007436	0.0124344
Diesel Grader	0.309	5.577	0.0006798	0.0122694
Diesel Refrigeration Truck	0.338	5.652	0.0007436	0.0124344
Diesel Water Truck	0.309	5.577	0.0006798	0.0122694

Convert grams to pounds: (g)x(.0022) = lbs
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Emission Factors derived from the EPA's Exhaust and Crankcase Emission Factors for Nonroad Engine Modeling -- Compression-Ignition, July 2010

Conformity Determination Cont'd

**BBA Mitigation Project
Ascension SB Mitigation Site**

**Scraping, Grading, & Planting
Ascension Parish, Louisiana**

Table 3
Annual VOC and NOx Emissions Totals

Total Calculated Emissions		
Type of Construction Equipment	VOC tons/yr	NOx tons/yr
Diesel Bull Dozer	0.00595	0.09948
Diesel Grader	0.00935	0.16870
Diesel Refrigeration Truck	0.00245	0.04103
Diesel Water Truck	0.00510	0.09202
TOTALS	0.02285	0.40123

Emissions Formula: $(\text{lbs}/\text{hp}\text{-hr}) \times (\text{hp}) \times (\text{hr}) \times (\text{days}) \times (\# \text{ of units}) / 2000 = \text{Tons}/\text{yr}$

NOTE: The listed equipment is the type and number of equipment that may typically be used at a levee stabilization project.