Air Quality Permitting
Statement of Basis

December 8, 2005

Permit to Construct No. P-040412

City of Burley

Burley/Heyburn Industrial Park

ADI-BVF Anaerobic Digester Flares

Facility ID No. 067-00022

Prepared by:

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AIR QUALITY DIVISION

FINAL

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Acronyms, Units, and Chemical Nomenclature

AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CFR	Code of Federal Regulations
CH_4	Methane
CO	carbon monoxide
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
HAPs	Hazardous Air Pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
m	meter(s)
NAAQS	National ambient air quality standard
MACT	Maximum Achievable Control Technology
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	nitrogen oxides
NSPS	New Source Performance Standards
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTE	potential to emit
Rules	Rules for the Control of Air Pollution in Idaho
scf	standard cubic feet
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SM	Synthetic Minor
SO_2	sulfur dioxide
T/yr	tons per year
$\mu g/m^3$	micrograms per cubic meter
UTM	Universal Transverse Mercator
VOC	volatile organic compound

1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01 200 et seq., *Rules for the Control of Air Pollution in Idaho,* for issuing permits to construct (PTC).

2. FACILITY DESCRIPTION

The City of Burley has acquired the ADI Bulk Volume Fermenter (BVF) anaerobic digester facility located at the Burley/Heyburn Industrial Park. The City of Burley will use the ADI-BVF anaerobic digester to treat wastewater from cheese processing plants. The wastewater for this facility will come from cheese processors who will treat the wastewater prior to discharging to this wastewater treatment plant.

Pretreated wastewater from cheese processing plants is retained and biologically degraded in the ADI-BVF anaerobic digester. The biogas byproducts created include methane (CH_4), carbon dioxide (CO_2), and hydrogen sulfide (H_2S). The biogas composition is approximately 55% - 60% CH_4, 40% - 45% CO_2, and less than 1% H_2S. All biogas byproducts are collected from under the cover of the digester and burned by the flare system. The flare system consists of two flares, one being a backup. Only one flare operates at a time. The criteria pollutants emitted from the biogas flares are PM_{10}, SO_2, CO, NO_x, and VOC.

3. FACILITY / AREA CLASSIFICATION

This facility is not a major facility as defined in IDAPA 58.01.01.205 and IDAPA 58.01.01.008.10 because its potential to emit is limited to less than all major source thresholds. This facility is not a designated facility as defined in IDAPA 58.01.01.006.27.

The facility is not subject to New Source Performance Standards, in accordance with 40 CFR, Part 60; National Emission Standards for Hazardous Air Pollutants, in accordance with 40 CFR, Part 61; or National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT), in accordance with 40 CFR, Part 63. The Standard Industrial Classification defining the facility is 4952, Sewerage Systems.

This facility is located with AQCR 63 and UTM zone 12, which is located in Cassia County. This area is classified as unclassifiable for all regulated criteria air pollutants. There are no Class I area within 10 kilometers of the facility.

This facility is classified as a synthetic minor facility because it's potential to emit greater than or equal to 80%, but less than 100% of a Tier I operating permit major source threshold (e.g. an SM80 facility). Therefore, the AIRS facility classification is SM80. The AIRS information provided in Appendix A of this statement of basis defines the classification for each regulated air pollutant from this facility. This required information is entered into the EPA AIRS database.

4. APPLICATION SCOPE

The City of Burley has acquired the ADI Bulk Volume Fermenter (BVF) anaerobic digester facility located at the Burley/Heyburn Industrial Park. The City of Burley proposes to operate the ADI-BVF anaerobic digester facility to treat wastewater generated by cheese processing plants. The wastewater for this facility will come from cheese processors who will treat the wastewater prior to discharging to this wastewater treatment plant. The City of Burley requests DEQ to issue a permit to construct that will accommodate new cheese processors as they come online. The application is designed to accommodate committed and potential future cheese processors.

4.1 Application Chronology

April 4, 2005 DEQ receives a PTC application from City of Burley

May 5, 2005 DEQ determines the application complete

June 24, 2005 DEQ provides draft permit to the facility and the Twin Falls Regional Office for review

5. PERMIT ANALYSIS

This section of the statement of basis describes the regulatory requirements for this PTC action.

5.1 Equipment Listing

The ADI-BVF anaerobic digester has a capacity of approximately 23 million gallons and a flare system which will be used to burn the biogas generated as the wastewater biodegrades. The digester is covered and all biogas is collected and flared. The ADI-BVF flare system consists of two flares, one being a backup or standby flare. The flare system has the following specifications:

- Rated heat input (MMBtu/hr): 37.5
- Maximum biogas generation (scf/day) 1,500,000
- Exit gas velocity (fps): 65.6
- Exit gas temperature (°F): ~1,832
- Stack height (ft): 37.5 [each stack]
- Stack diameter (ft): 3.5 [each stack]
- Biogas heat content (Btu/scf): ~600

The emissions from the flares are uncontrolled.

5.2 Emission Inventory

Emissions estimates for CO, NO_X, VOC, and PM/PM_{10} were calculated using emission factors from AP-42 (Section 1.4 (7/98 rev.)) for the combustion of natural gas (or essentially 100% methane). The emission factor was multiplied by (0.60) 60% to account for the methane in the biogas. The pound per hour emissions rates were estimated by multiplying the emission factors by 1,500,000 standard cubic feet per day and then dividing the product by 24 hours per day. The tons per year emissions rates were calculated by multiplying the hourly rates by 8,760 hours per year and dividing the product by the unit conversion factor of 2,000 pounds per ton.

As requested by the applicant, the SO_2 is permitted at 99 Tons per year to give the facility the maximum sulfur loading without causing the source to trigger Tier I operating permitting requirements and without exceeding the applicable national ambient air quality standard (NAAQS). The modeled pound per hour rate was back calculated by multiplying 99 tons per year by 2,000 pounds per ton and dividing the product by 8,760 hours per year.

The emissions factors and the emissions inventory are shown in Table 5.2.1.

Table 5.2.1 EMISSION FACTORS FOR BIOGAS FLARE

Pollutant	Emissions Factor (lb/106 scf)	Emissions (lb/hr)	Emissions (Ton/yr)
PM/PM_{10}	4.6	0.29	1.26
NO_X	60	3.8	16.4
CO	50	3.1	13.7
VOC	3.3	0.21	0.90
SO_2	To be tested	22.60	99

5.3 Modeling

The facility has demonstrated, to DEQ's satisfaction, that emissions from this facility will not cause or significantly contribute to a violation of any ambient air quality standard. The detailed modeling analysis is included in Appendix B. A summary of the modeling analysis is presented in Tables 5.2.2.

Table 5.2.2 FULL IMPACT ANALYSIS RESULTS FOR PM_{10} AND NO_2

Pollutant	Averaging Period	Facility Ambient Impact ($\mu g/m^3$)	Background concentrating ($\mu g/m^3$)	Total Ambient Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	Percent of NAAQS
SO_2	24-hour	8.38	2.6	34.38	365	9.4%

5.4 Regulatory Review

This section describes the regulatory analysis of the applicable air quality rules with respect to this PTC.

IDAPA 58.01.01.201 ..... Permit to Construct Required

This facility is proposing to process the pretreated wastewater from cheese making plants. The proposed project does not qualify for an exemption under Sections 220 through 223 of the Rules; therefore, a Permit to Construct is required.

IDAPA 58.01.01.203.02 ..... NAAQS

"No permit to construct shall be granted for a new or modified stationary source unless the applicant shows to the satisfaction of DEQ all of the following:....02. NAAQS...."

The facility has demonstrated, to DEQ's satisfaction, that this project will not cause or significantly contribute to a violation of any ambient air quality standards of PM_{10}, NO_2, CO and SO_2. The summary of the modeling analysis is in Table 5.2.2. Detailed modeling analysis is included in Appendix B.

IDAPA 58.01.01.203.03 ..... Toxic Air Pollutants (TAP)

"No permit to construct shall be granted for a new or modified stationary source unless the applicant shows to the satisfaction of DEQ all of the following:....03. Toxic Air Pollutants Using the methods provided in Section 210, the emissions of toxic air pollutants from the stationary source or modification would not injure or unreasonably affect human or animal life or vegetation as required by Section 161. Compliance with all applicable toxic air pollutant carcinogenic increments and toxic air pollutant non-carcinogenic increments will also demonstrate preconstruction compliance with Section 161 with regards to the pollutants listed in Sections 585 and 586."

Per the information in the application, there are no known TAPs associated with the flare system. However, per manufacturer's guarantee for a similar flare system, it states that the flare will destroy 70% to 90% of H_2S in the biogas from the digester. A calculation was done based on the flare's design capacity. It was found that the H_2S hourly emissions exceeded the screening emissions level listed in IDAPA 58.01.01.585 but its ambient impact is below the acceptable ambient concentration listed in IDAPA 58.01.01.585. Therefore, the facility is in compliance with IDAPA 58.01.01.210.

IDAPA 58.01.01.625 ..... Visible Emissions

This regulation states that any point of emission shall not have a discharge of any air pollutant for a period aggregating more than three minutes in any 60-minute period of greater than 20% opacity.

The emissions points at this facility are subject to this regulation.

IDAPA 58.01.01 785 ..... Rules for Control of Incinerators

This regulation establishes particulate matter emission limits for incinerators. It reads "No person shall allow, suffer, cause or permit any incinerator to discharge more than two-tenths (0.2) pounds of particulates per one hundred (100) pounds of refuse burned." Incinerator is defined in IDAPA 58.01.01.006.51 as, "**Incinerator**. Any source consisting of a furnace and all appurtenances thereto designed for the destruction of refuse by burning. "Open Burning" is not considered incineration. For purposes of these rules, the destruction of any combustible liquid or gaseous material by burning in a flare stack shall be considered incineration."

The flare is subject to this regulation per the definition of incinerator. The calculated result indicates that the flare system is in compliance with the standard. The calculation is in the following:

- Using idea gas law to calculate the biogas mass (in 100 pounds per hour) burned at the flare's maximum capacity:

  W, biogas = PsVsMw, biogas / RTs = 1 atm x 1,500,000 scf/day, flare design capacity x (1 day/24 hours) x 16.8 lb/lb-mol / 0.7302 (atm-scf/lb-mol)/491.67 °R x (100 lb/100 lb) = 29.2 (100 lb/hr)

  Where

  Ps: standard pressure, 1 atm
  Vs: flare design capacity at standard condition
  Mw: molecular weight
  Ts: standard temperature, 491.67 °R
  W, biogas: flare mass rate at design capacity
  R: universal gas constant, and

  $$Mw,biogas\ (lb/lb-mol) = Mw\ of\ S \times 1\% + Mw\ of\ C \times 55\% + Mw\ of\ H_2 \times 14\% + Mw\ of\ O_2 \times 3\%$$

- The maximum estimated PM emissions from emissions inventory is 0.29 lb/hr.
- The estimated emissions rate in pounds of PM per 100 pounds of refuse burned = (0.29 lb/hr PM) / 29.2 (100 lb of biogas/hr) = 0.01 lb of PM/100 lb of biogas

  This emissions rate is less than the standard of 0.2 lb of PM/100 lb of biogas. Therefore, the flare is in compliance with the standard.

40 CFR 60 ..... New Source Performance Standards (NSPS)

The ADI-BVF flare system is not subject to NSPS requirements.

40 CFR 61 and 63 ..... National Emission Standards for Hazardous Air Pollutants (NESHAP) & MACT

The ADI-BVF flare system is not subject to NESHAP or MACT requirements.

5.5 *Permit Conditions Review*

5.5.1 Permit Conditions 2.1 and 2.2 provide the process description and emissions control description.

5.5.2 Permit Conditions 2.1 to 2.6, and 2.9 list the applicable emissions limits and requirements. The flare is in compliance with Permit Condition 2.4 based on the calculation. Therefore, no corresponding monitoring is required.

5.5.3 Permit Conditions 2.7 and 2.11 list "Pilot Flame" operating requirements and monitoring requirements. These requirements ensure that H_2S in the biogas doesn't emit to the air but is combusted through the flare system to reduce odor.

5.5.4 Permit Conditions 2.8 and 2.9 ensure that the facility complies with Permit Conditions 2.6 and 2.9 for odor rules and fugitive reasonable control rules.

5.5.5 Permit Condition 2.10 limits process stream that can be treated in the waster treatment plant because only the permitted process stream was analyzed in the application for this permitting action.

5.5.6 Permit Condition 2.12 requires the facility to conduct performance test to demonstrate compliance with the SO_2 emissions limit. The applicant will conservatively estimate SO_2 emissions from the digester flare by assuming that 80% of H_2S from the digester is oxidized/combusted to form SO_2. The emissions rate of H_2S from the digester in pound per hour will be estimated. The details on which parameters will be measured and how H_2S emissions from the digester in pound per hour are calculated will be provided in the performance test protocol required in Permit Condition 2.12.3.

5.5.7 Permit Condition 2.13 requires the facility to go through SO_2 monitoring re-evaluation when the performance test indicates that SO_2 emissions are equal to and greater than 80 tons per year. This ensures that the facility truly stays as synthetic minor source. The permittee and DEQ will follow the timeframe requirements in IDAPA 58.01.01.200 when go through SO_2 monitoring re-evaluation.

5.5.8 Permit Condition 2.14 requires the facility to develop an O&M manual for the flare system because the proper operation of flare ensures the destruction of H_2S, and causes less odor problems.

6. PERMIT FEES

The facility submitted a $1,000 PTC application fee on April 1, 2005, in accordance with IDAPA 58.01.01.224. The flare's emissions increase is between 10 to 100 tons range. In accordance with IDAPA 58.01.01.225, the PTC processing fee is $5,000. The facility submitted the processing fee on December 8, 2005.

Table 5.1 PTC PROCESSING FEE TABLE

Emissions Inventory			
Pollutant	**Annual Emissions Increase (T/yr)[a]**	**Annual Emissions Reduction (T/yr)**	**Annual Emissions Change (T/yr)**
NO_X	Negligible	0	negligible
SO_2	59	0	59
CO	Negligible	0	negligible
PM_{10}	Negligible	0	negligible
VOC	Negligible	0	negligible
TAPS/HAPS	Negligible	0	negligible
Total:	59	0	59
Fee Due	**$ 5,000.00**		

[a] Emissions increased from original PTC No. P-040400, issued July 12, 2004, Facility ID No. 067-00017.

7. PERMIT REVIEW

7.1 Regional Review of Draft Permit

The draft permit was made available for Twin Falls Regional Office review on June 14, 2005. The comments were received on June 15, 2005.

7.2 Facility Review of Draft Permit

The draft permit was provided for facility review. The facility comments were addressed in the permit.

7.3 Public Comment

An opportunity for public comment period on the PTC application was provided as required by IDAPA 58.01.01.209.01.c. To date, no comments have been received and no entity has requested a comment period.

8. RECOMMENDATION

Based on review of application materials, and all applicable state and federal rules and regulations, staff recommends that the City of Burley be issued final PTC No. P-040412 for the ADI-BVF anaerobic digester flare system. No public comment period is recommended, no entity has requested a comment period, and the project does not involve PSD requirements.

SC/sd P-040412

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APPENDIX A

AIRS INFORMATION

Permit to Construct No. P-040412

Burley/Heyburn Industrial Park, City of Burley- ADI-BVF Anaerobic Digester Flares, Heyburn, Idaho

AIRS/AFS[a] FACILITY-WIDE CLASSIFICATION[b] DATA ENTRY FORM

AIR PROGRAM / POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	SM80	TITLE V	AREA CLASSIFICATION A – Attainment U – Unclassifiable N – Nonattainment
SO_2	SM					SM80		U
NO_x	B							U
CO	B							U
PM_{10}	B							U
PT (Particulate)	B							U
VOC	B							U
THAP (Total HAPs)	B							
			APPLICABLE SUBPART					

[a] Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

[b] AIRS/AFS Classification Codes:

A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For NESHAP only, class "A" is applied to each pollutant which is below the 10 T/yr threshold, but which contributes to a plant total in excess of 25 T/yr of all NESHAP pollutants.

SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.

B = Actual and potential emissions are below all applicable major source thresholds.

C = Class is unknown.

ND = Major source thresholds are not defined (e.g., radionuclides).

APPENDIX B

Modeling Review

Permit to Construct No. P-040412

Burley/Heyburn Industrial Park, City of Burley- ADI-BVF Anaerobic Digester Flares, Heyburn, Idaho

Facility ID No. 067-00022

MEMORANDUM

DATE: May 6, 2005

TO: Shawnee Chen, Air Quality Division

THROUGH: Kevin Schilling, Stationary Source Modeling Coordinator, Air Quality Division

FROM: Dustin Holloway, Modeling Analyst, Air Quality Division

PROJECT NUMBER: P-040412

SUBJECT: Modeling Review for the Burley/Heyburn Industrial Park

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1. SUMMARY

JBR Environmental Consultants, Inc. conducted air quality dispersion modeling in support of a permit to construct (PTC) application for the City of Burley to operate the former J.R. Simplot wastewater treatment facility (Burley/Heyburn Industrial Park). The only point source at this facility will be the bulk volume fermenter flare. The analysis includes a significant impact analysis for PM_{10}, SO_2, NO_2, and a full impact analysis for 24-hour SO_2 impacts.

Based on the results of the analyses, DEQ has determined that the modeling analysis: 1) utilized appropriate methods and models; 2) was conducted using reasonably accurate or conservative model parameters and input data; 3) appropriately adhered to established DEQ guidelines for new source review dispersion modeling; 4) showed that predicted pollutant concentrations at all receptor locations, when appropriately combined with background concentrations, were below stated air quality standards.

2. BACKGROUND INFORMATION

2.1 *Applicable Air Quality Impact Limits*

The Burley/Heyburn Industrial Park is located near Burley, in Cassia County. Cassia county is designated attainment or unclassifiable for all criteria air pollutants. The following table summarizes the applicable regulatory limits for this area.

Table 2.1 APPLICABLE REGULATORY LIMITS

Pollutant	Averaging Period	Significant Contribution Levels ($\mu g/m^3$)[a, b]	Regulatory Limit ($\mu g/m^3$)[c]	Modeled Value Used[d]
PM_{10}[e]	Annual	1	50[f]	Maximum 1st highest[g]
	24-hour	5	150[h]	Maximum 6th highest[i] Highest 2nd highest[j]
SO_2	Annual	1	80[f]	Maximum 1st highest[g]
	24-hour	5	365[k]	Highest 2nd highest[g]
	3-hour	25	1,300[h]	Highest 2nd highest[g]
NO_2	Annual	1	100[f]	Maximum 1st highest[g]

[a] IDAPA 58.01.01.006.93
[b] Micrograms per cubic meter
[c] IDAPA 58.01.01.577 for criteria pollutants, IDAPA 58.01.01.585 for non-carcinogenic toxic air pollutants IDAPA 58.01.01.586 for carcinogenic toxic air pollutants.
[d] The maximum 1st highest modeled value is always used for significant impact analysis and for all toxic air pollutants.
[e] Particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers
[f] Never expected to be exceeded in any calendar year.
[g] Concentration at any modeled receptor.
[h] Never expected to be exceeded more than once in any calendar year.
[i] Concentration at any modeled receptor when using five years of meteorological data.
[j] The highest 2nd high is considered to be conservative for five years of meteorological data.
[k] Not to be exceeded more than once per year.

2.2 Background Concentrations

DEQ updated the background concentration data for Idaho in the Spring of 2003[1]. The 24-hour average background SO_2 concentration used in this analysis is the default for small town/suburban areas in Idaho.

Table 2.2 BACKGROUND CONCENTRATIONS

Pollutant	Averaging Period	Background concentrations ($\mu g/m^3$)
SO_2	24-hour	26

3. ASSESSMENT OF MODELING ANALYSIS

3.1 Modeling Methodology

The modeling analysis was performed by JBR Environmental Consultants, Inc. for the City of Burley. The analysis included a significant impact analysis for PM_{10}, NO_2, and SO_2. The estimated 24-hour SO_2 impact exceeded the significant contribution level. Therefore, the facility's ambient concentration was added to the areas background concentration and compared to the national ambient air quality standard (NAAQS) for SO_2. The following table summarizes the assumptions used in the model and DEQ's review/determination of those parameters.

[1] Hardy, Rick and Schilling, Kevin. *Background Concentrations for Use in New Source Review Dispersion Modeling*. Memorandum to Mary Anderson, March 14, 2003.

Table 3.1 MODELING PARAMETERS

Parameter	What Facility Submitted	DEQ's Review/Determination
Modeling Protocol	None submitted	Although no protocol was submitted, the analysis contained sufficient information for DEQ to determine that the facility will not cause or contribute to a violation of any ambient air quality standard.
Model Selection	ISCST3	This is an appropriate model for this facility.
Meteorological Data	1987-1991 Pocatello surface data and 1987-1991 Boise upper air data	The 2000 Heyburn meteorological data is more representative of the Heyburn area. DEQ ran the submitted analysis with the Heyburn meteorological data.
Model Options	Regulatory Default	The submitted analysis used regulatory default options. DEQ's analysis allowed missing meteorological data. The Heyburn meteorological data has some missing data points. However, the data conforms to the quality assurance standard of 90% completeness per quarter.
Land Use	Rural	The majority of the land within three kilometers of this facility is agricultural or rural residential.
Terrain	Effects of terrain were calculated	Receptor elevations were included in the modeling analysis and the model was run to account for the effects of both simple and complex terrain.
Building Downwash	Downwash was turned off	There are no buildings near the flare which could cause downwash.
Receptor Network	250 meter course grid; 100 meter medium grid; 25 meter fine grid	This grid was modified by DEQ after changing the meteorological data because the location of the maximum concentration did not fall into the refined grid. DEQ used a refined grid with 50 meter spacing in the area of maximum concentration.
Facility Layout	N/A	There are no buildings near the flare stack and the entire area around the flare was considered to be ambient air.

3.2 Emission Rates

The modeling analysis assumes that the flare will operate at maximum capacity throughout the year. The following table summarizes the emissions rates used in the modeling analysis.

Table 3.2 EMISSION RATES

	Emission Rate		
	PM_{10} (lb/hr)	NO_2 (lb/hr)	SO_2 (lb/hr)
Flare	0.28	3.70	22.60

3.3 Emission Release Parameters

The applicant used the Ohio EPA recommended parameters for refined modeling of flare emissions. The exit velocity was set to 20 m/s, the temperature was set to 1,273 K, and the effective stack release diameter was calculated assuming that $d_{equiv.} = 0.1755(Q)^{0.5}$, where Q is the heat release in MMBtu/hr, and $d_{equiv.}$ is in meters. The following table summarizes the release parameters used in the dispersion modeling analysis.

Table 3.3 EMISSION RELEASE PARAMETERS

	Easting (m)	Northing (m)	Elevation (m)	Stack Height (ft)	Stack Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)
Flare	272,696	4,713,933	1,265	37.4	1273	20	1.07

3.4 Results

3.4.1 Significant Impact Analysis Results

Table 3.4 SIGNIFICANT IMPACT ANALYSIS RESULTS

Pollutant	Averaging Period	Ambient Concentration ($\mu g/m^3$)	Significant Contribution Levels ($\mu g/m^3$)	Exceeds the SCL (Y or N)
PM_{10}	24-hour	0.10	5	N
	Annual	0.01	1	N
SO_2	3-hour	17.26	25	N
	24-hour	8.38	5	Y
	Annual	0.91	1	N
NO_2	Annual	0.15	1	N

3.4.2 Full Impact Analysis Results

Table 3.5 FULL IMPACT ANALYSIS RESULTS

Pollutant	Averaging Period	Facility Ambient Impact ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Total Ambient concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	Percent of NAAQS
SO_2	24-hour	8.38	26	34.38	365	9.4%

The results of the analysis demonstrate, to DEQ's satisfaction, that the flare will not cause or contribute to a violation of any ambient air quality standard.