

Mail Application To:

New Mexico Environment Department
Air Quality Bureau
Permitting Section
1301 Siler Road, Building B
Santa Fe, NM 87507-3113

Phone: (505) 476-4300
Fax: (505) 476-4375
www.nmenv.state.nm.us/aqb

**For Department use only:**

AIRS No.:

Universal Air Quality Permit Application

Use this application for NOI, NSR, or Title V sources.

Use this application for: the initial application, modifications, technical revisions, and renewals. For technical revisions, complete Sections, 1-A, 1-B, 2-E, 3, 9 and any other sections that are relevant to the requested action; coordination with the Air Quality Bureau permit staff prior to submittal is encouraged to clarify submittal requirements and to determine if more or less than these sections of the application are needed. For NOI applications, even though the entire UA1, UA2, and UA3 applications must be submitted electronically on a CD, also submit hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page. Use this application for streamline permits as well.

This application is being submitted as (check all that apply): Request for a No Permit Required Determination (no fee)
 Updating an application currently under NMED review. Include this page and all pages that are being updated (no fee required).
 Construction Status: Not Constructed Existing Permitted (or NOI) Facility Existing Non-permitted (or NOI) Facility
 Minor Source: a NOI 20.2.73 NMAC 20.2.72 NMAC application/revision 20.2.72.300 NMAC Streamline application
 Title V Source: Title V (new) Title V renewal TV minor mod. TV significant mod. TV Acid Rain: New Renewal
 PSD Major Source: PSD major source (new) minor modification to a PSD source a PSD major modification

Acknowledgements: I acknowledge that a pre-application meeting is available to me upon request NPR (no fee)
 \$500 NSR Permit Filing Fee enclosed **OR** The full permit fee associated with 10 fee points (required w/ streamline applications).
 Check No.: [redacted] in the amount of [redacted] (Fee not required for Title V) This facility meets the applicable requirements to register as a Small Business and a check for 50% of the normal fee is enclosed (only applicable **provided** that NMED has a Small Business Certification Form from your company on file found at: http://www.nmenv.state.nm.us/aqb/permit/app_form.html).

Citation: Please provide the **low level citation** under which this application is being submitted: **20.2.70.200.A NMAC** (i.e. an example of an application for a new minor source would be 20.2.72.200.A NMAC, one example of a low level cite for a Technical Revision could be: 20.2.72.219.B.1.b NMAC, or a Title V acid rain cite would be: 20.2.70.200.C NMAC)

Synthetic Minor Source Information: A source is synthetic minor if its uncontrolled emissions are above major source applicability thresholds, but the facility is minor because it has federally enforceable requirements (federal requirements or permit conditions) that limit controlled emissions below major source thresholds. Facilities can be synthetic minor for either Title V (20.2.70 NMAC) or PSD (20.2.74 NMAC) or both. The Department tracks synthetic minor sources that are within 20% of either TV or PSD major source thresholds, referring to these as Synthetic Minor 80 Sources (abbreviated SM80). Please check all that apply:
 Prior to this permitting action this source is a TV major source, a TV synthetic minor source, a TV SM80 source.
 Prior to this permitting action this source is a PSD major source, a PSD synthetic minor source, a PSD SM80 source.
 This permitting action results in a TV synthetic minor source and/or PSD synthetic minor source.

Section 1 – Facility Information

Section 1-A: Company Information

Section 1-A: Company Information		AI # (if known): 35-043-0005	Updating permit #:
1	Facility Name: Intel Corporation	Plant primary SIC Code (4 digits): 3674	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): 4100 Sara Rd., Rio Rancho, NM 87124-1025		
2	Plant Operator Company Name: Brian A. Rashap	Phone/Fax: 505-893-6966	
a	Plant Operator Address: Intel Corporation, Mail Stop RR5-491, 4100 Sara Rd., Rio Rancho, NM 87124-1025		
b	Plant Operator's New Mexico Corporate ID or Tax ID: 01130029009		
3	Plant Owner(s) name(s): Brian A. Rashap	Phone/Fax: 505-893-6966	
a	Plant Owner(s) Mailing Address(s): Intel Corporation, Mail Stop RR5-491, 4100 Sara Rd., Rio Rancho, NM 87124-1025		

4	Bill To (Company): Brian A. Rashap	Phone/Fax: 505-893-6966
a	Mailing Address: Intel Corporation, Mail Stop RR5-491, 4100 Sara Rd., Rio Rancho, NM 87124-1025	E-mail: brian.a.rashap@intel.com
5	X Preparer: Sarah Chavez □ Consultant:	Phone/Fax: 505-794-4917
a	Mailing Address: Intel Corporation, Mail Stop RR5-491, 4100 Sara Rd., Rio Rancho, NM 87124-1025	E-mail: sarah.t.chavez@intel.com
6	Plant Operator Contact: Brian A. Rashap	Phone/Fax: 505-893-6966
a	Address: Intel Corporation, Mail Stop RR5-491, 4100 Sara Rd., Rio Rancho, NM 87124-1025	E-mail: brian.a.rashap@intel.com
7	Air Permit Contact: Frank Gallegos	Title: Environmental, Health and Safety Manger
a	E-mail: frank.e.gallegos@intel.com	Phone/Fax: 505-794-4923
b	Mailing Address: Intel Corporation, Mail Stop RR5-491, 4100 Sara Rd., Rio Rancho, NM 87124-1025	

Section 1-B: Current Facility Status

1	Has this facility already been constructed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it currently operating in New Mexico? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2	Is the plant currently shut down? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, give month and year of shut down (MM/YY):
3	Was this facility constructed before 8/31/1972 and continuously operated since 1972? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
4	If Yes, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since 8/31/1972? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
5	Does this facility have a Title V operating permit (20.2.70 NMAC)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the permit No. is: P-
6	Has this facility been issued a No Permit Required (NPR)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NPR No. is:
7	Has this facility been issued a Notice of Intent (NOI)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NOI No. is:
8	Does this facility have a construction permit (20.2.72 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: 325-M11R2
9	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the registr. No. is:

Section 1-C: Facility Input Capacity & Production Rate

1	What is the facility's maximum input capacity, specify units (reference here and list capacities in Section 20, if more room is required) Contact NMED for specific information regarding this section.			
a	Current	Hourly:	Daily:	Annually:
b	Proposed	Hourly:	Daily:	Annually:
2	What is the facility's maximum production rate, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly:	Daily:	Annually:
b	Proposed	Hourly:	Daily:	Annually:

Section 1-D: Facility Location Information

1	Section: 31,32	Range: 3E	Township: 12N	County: Sandavol	Elevation (ft): 5,240
2	UTM Zone: <input type="checkbox"/> 12 or <input checked="" type="checkbox"/> 13			Datum: <input type="checkbox"/> NAD 27 <input checked="" type="checkbox"/> NAD 83 <input type="checkbox"/> WGS 84	
a	UTM E (in meters, to nearest 10 meters): 49153			UTM N (in meters, to nearest 10 meters): 3898946	

b	AND Latitude (deg., min., sec.): 35, 13, 20	Longitude (deg., min., sec.): 106, 39, 27
3	Name and zip code of nearest New Mexico town: Rio Rancho, New Mexico (87124)	
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary):	
5	The facility is 1 (distance) miles Southeast (direction) of Rio Rancho (nearest town).	
6	Status of land at facility (check one): <input checked="" type="checkbox"/> Private <input type="checkbox"/> Indian/Pueblo <input type="checkbox"/> Federal BLM <input type="checkbox"/> Federal Forest Service <input type="checkbox"/> Other (specify)	
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: Albuquerque, Bernalillo, Corrales, Rio Rancho, Santa Ana Pueblo, Sandia Pueblo, Bernalillo County, Sandoval County	
8	20.2.72 NMAC applications only: Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see www.nmenv.state.nm.us/aqb/modeling/classIareas.html)? <input type="checkbox"/> Yes <input type="checkbox"/> No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers:	
9	Name nearest Class I area: Bandelier Wilderness Area	
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): 59.46	
11	Distance (meters) from the perimeter of the Area of Operations (AO is defined as the plant site inclusive of all disturbed lands, including mining overburden removal areas) to nearest residence, school or occupied structure: 15	
12	Method(s) used to delineate the Restricted Area: Fencing or buildings with restricted access are used to delineate Restricted Area for the Intel Rio Rancho Facility. "Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.	
13	Is this a stationary portable source as defined in 20.2.72.7.X NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
14	Will this facility operate in conjunction with other air regulated parties on the same property? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, what is the name and permit number (if known) of the other facility?	

Section 1-E: Proposed Operating Schedule (The 1-E.1 & 1-E.2 operating schedules may become conditions in the permit.)

1	Facility maximum operating ($\frac{\text{hours}}{\text{day}}$): 24	($\frac{\text{days}}{\text{week}}$): 7	($\frac{\text{weeks}}{\text{year}}$): 52	($\frac{\text{hours}}{\text{year}}$): 8,760
2	Facility's maximum daily operating schedule (if less than 24 $\frac{\text{hours}}{\text{day}}$)? Start:	<input type="checkbox"/> AM <input type="checkbox"/> PM	End:	<input type="checkbox"/> AM <input type="checkbox"/> PM
3	Month and year of anticipated start of construction: NA			
4	Month and year of anticipated construction completion: NA			
5	Month and year of anticipated startup of new or modified facility: NA			
6	Will this facility operate at this site for more than one year? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

Section 1-F: Other Facility Information

1	Are there any current Notice of Violations (NOV), compliance orders, or any other compliance or enforcement issues related to this facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, specify:		
a	If yes, NOV date or description of issue:	NOV Tracking No:	
b	Is this application in response to any issue listed in 1-F, 1 or 1a above? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, provide the 1c & 1d info below:		
c	Document Title:	Date:	Requirement # (or page # and paragraph #):
d	Provide the required text to be inserted in this permit:		
2	Is air quality dispersion modeling being submitted with this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

3	Does this facility require an "Air Toxics" permit under 20.2.72.400 NMAC & 20.2.72.502, Tables A and/or B? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a	If Yes, what type of source? <input type="checkbox"/> Major (<input type="checkbox"/> ≥ 10 tpy of any single HAP OR <input type="checkbox"/> ≥ 25 tpy of any combination of HAPS) OR <input checked="" type="checkbox"/> Minor (<input type="checkbox"/> < 10 tpy of any single HAP AND <input checked="" type="checkbox"/> < 25 tpy of any combination of HAPS)
b	If 4.a is Yes, identify the subparts in 40 CFR 61 & 40 CFR 63 that apply to this facility (If no subparts apply, enter "N/A."): 40 CFR 63 Subpart ZZZZ

Section 1-G: Streamline Application (This section applies to 20.2.72.300 NMAC Streamline applications only)

1	<input type="checkbox"/> I have filled out Section 18, "Addendum for Streamline Applications." <input checked="" type="checkbox"/> N/A (This is not a Streamline application.)
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Section 1-H: Title V Specific Information (Fill this section out only if this is a Title V application.)

1	Responsible Official (20.2.70.300.D.2 NMAC): Brian A. Rashap	Phone: 505-893-6966
a	R.O. Title: Corporate Services Manager	R.O. e-mail: brian.a.rashap@intel.com
b	R. O. Address: Intel Corporation, Mail Stop RR5-491, 4100 Sara Rd., Rio Rancho, NM 87124-1025	
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC):	Phone:
a	A. R.O. Title:	A. R.O. e-mail:
b	A. R. O. Address:	
3	Company's Corporate or Partnership Relationship to any other Air Quality Permittee (List the names of any companies that have operating (20.2.70 NMAC) permits and with whom the applicant for this permit has a corporate or partnership relationship): NA	
4	Name of Parent Company ("Parent Company" means the primary name of the organization that owns the company to be permitted wholly or in part.): Intel Corporation	
a	Address of Parent Company: 2200 Mission College Blvd., Santa Clara, CA 95054-1549	
5	Names of Subsidiary Companies ("Subsidiary Companies" means organizations, branches, divisions or subsidiaries, which are owned, wholly or in part, by the company to be permitted.): From February 2012 10K filing: Componentes Intel de Costa Rica, S.A., Intel Americas, Inc., Intel Asia Holding Limited, Intel Capital (Cayman) Corporation, Intel Capital Corporation, Intel China Ltd., Intel Copenhagen ApS, Intel Corporation (UK) Ltd., Intel Electronics Finance Limited, Intel Electronics Ltd., Intel Europe, Inc., Intel Holdings B.V., Intel International, Intel Investment Management Limited, Intel Ireland Limited, Intel Israel (74) Limited, Intel Israel Holdings B.V., Intel Kabushiki Kaisha, Intel Malaysia Sdn. Berhad, Intel Massachusetts, Inc., Intel Mobile Communications GmbH, Intel Overseas Funding Corporation, Intel Products (M) Sdn. Bhd., Intel Semiconductor (Dalian) Ltd., Intel Semiconductor (US) Limited, Intel Technology Sdn. Berhad, McAfee, Inc., Mission College Investments Ltd., Wind River Systems, Inc.	
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations: Frank Gallegos, 505-794-4923	
7	Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes: Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B)? If yes, state which ones and provide the distances in kilometers: Laguna Indian reservation – 29.3 km, Canoncito Navajo Indian Reservation – 32 km, Isleta Indian Reservation – 29.8 km, Sandia Pueblo 4.6 km, San Felipe Pueblo – 20.2 km, Zia Indian Reservation – 18.6 km, Santa Ana Pueblo – 14.4 km, Santo Domingo Pueblo - 36.7 km, Cochiti Pueblo – 46.3 km, Jemez Indian Reservation – 38 km, Navajo Indian Reservation – 77.2 km, Bernalillo county 0.03 km	

Section 1-I – Submittal Requirements

Each 20.2.73 NMAC (NOI), a 20.2.70 NMAC (Title V), a 20.2.72 NMAC (NSR minor source), or 20.2.74 NMAC (PSD) application package shall consist of the following:

Hard Copy Submittal Requirements:

- One hard copy **original signed and notarized application package printed double sided 'head-to-toe' 2-hole punched** as we bind the document on top, not on the side; except Section 2 (landscape tables), which should be **head-to-head**. If 'head-to-toe printing' is not possible, print single sided. Please use **numbered tab separators** in the hard copy submittal(s) as this facilitates the review process.

- 2) If the application is for a NSR or Title V permitting action, include one working hard **copy** for Department use. This copy does not need to be 2-hole punched. Technical revisions only need to fill out Section 1-A, 1-B, 3, and should fill out those portions of other Section(s) relevant to the technical revision. TV Minor Modifications need only fill out Section 1-A, 1-B, 1-H, 3, and those portions of other Section(s) relevant to the minor modification. NMED may require additional portions of the application to be submitted, as needed.
- 3) The entire NOI or Permit application package, including the full modeling study, should be submitted electronically on compact disk(s) (CD). **Two** CD copies are required (in sleeves, not crystal cases, please), with additional CD copies as specified below.
- 4) If **air dispersion modeling** is required by the application type, include the **NMED Modeling Waiver OR** one additional electronic copy of the air dispersion modeling including the input and output files. The dispersion modeling summary report **only** should be submitted as hard copy(ies) unless otherwise indicated by the Bureau. The complete dispersion modeling study, including all input/output files, should be submitted electronically as part of the electronic submittal.
- 5) If subject to PSD review under 20.2.74 NMAC (PSD) include,
 - a. one additional hard copy and one additional CD copy for US EPA,
 - b. one additional hard copy and one additional CD copy for each federal land manager affected (NPS, USFS, FWS, USDI) and,
 - c. one additional hard copy and one additional CD copy for each affected regulatory agency other than the Air Quality Bureau.

Electronic Submittal Requirements [in addition to the required hard copy(ies)]:

- 1) All required electronic documents shall be submitted in duplicate (2 separate CDs). The documents should be submitted in Microsoft Office compatible file format (Word, Excel, etc.) allowing us to access the text in the documents (copy & paste). Any documents that cannot be submitted in a Microsoft Office compatible format shall be saved as a PDF file from within the electronic document that created the file. If you are unable to provide Microsoft office compatible electronic files or internally generated PDF files of files (items that were not created electronically: i.e. brochures, maps, graphics, etc.), submit these items in hard copy format with the number of additional hard copies corresponding to the number of CD copies required. We must be able to review the formulas and inputs that calculated the emissions.
- 2) It is preferred that this application form be submitted as 3 electronic files (**2 MSWord docs**: Universal Application section 1 and Universal Application section 3-19) and **1 Excel file** of the tables (Universal Application section 2) on the CD(s). Please include as many of the 3-19 Sections as practical in a single MS Word electronic document. Create separate electronic file(s) if a single file becomes too large or if portions must be saved in a file format other than MS Word.
- 3) The **electronic file names** shall be a maximum of 25 characters long (including spaces, if any). The format of the electronic Universal Application shall be in the format: "A-3423-FacilityName". The "A" distinguishes the file as an application submittal, as opposed to other documents the Department itself puts into the database. Thus, all electronic application submittals should begin with "A-". Modifications to existing facilities should use the **core permit number** (i.e. '3423') the Department assigned to the facility as the next 4 digits. Use 'XXXX' for new facility applications. The format of any separate electronic submittals (additional submittals such as non-Word attachments, re-submittals, application updates) and Section document shall be in the format: "A-3423-9-description", where "9" stands for the **section #** (in this case Section 9-Public Notice). Please refrain, as much as possible, from submitting any scanned documents as this file format is extremely large, which uses up too much storage capacity in our database. Please take the time to fill out the **header information** throughout all submittals as this will identify any loose pages, including the Application Date (date submitted) & Revision # (0 for original, 1, 2, etc.; which will help keep track of subsequent partial update(s) to the original submittal. The footer information should not be modified by the applicant.

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Table 2-A: Regulated Emission Sources

Unit and stack numbering must correspond throughout the application package. If applying for a NOI under 20.2.73 NMAC, equipment exemptions under 2.72.202 NMAC do not apply.

Unit Number ¹	Source Description	Manufacturer	Model #	Serial #	Maximum or Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture or Reconstruction ²		Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	Applicable State & Federal Regulation(s) (i.e. 20.2.X, JJJJ, ...)	Replacing Unit No.
							Date of Installation /Construction ²	Emissions vented to Stack #					
ecs-boi-97	EC Boiler	Superior Boiler Works	6-5-6250-5150	12000	52.5 MMBtu/hr	52.5 MMBtu/hr		1993	NA ecs-boi-97s	10200602	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
ecs-boi-98	EC Boiler	Superior Boiler Works	6-5-6250-5150	12001	52.5 MMBtu/hr	52.5 MMBtu/hr		1993	NA ecs-boi-98s	10200602	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
blr-32-gd3-1	CUB Boiler	Superior Boiler Works	6-5-6250-5150	12255	52.5 MMBtu/hr	52.5 MMBtu/hr		1994	NA blr-32-gd3-1s	10200602	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
blr-32-gd3-2	CUB Boiler	Superior Boiler Works	6-5-6250-5150	12184	52.5 MMBtu/hr	52.5 MMBtu/hr		1994	NA blr-32-gd3-2s	10200602	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
blr-32-gd3-3	CUB Boiler	Superior Boiler Works	6-5-6250-5150	12185	52.5 MMBtu/hr	52.5 MMBtu/hr		1994	NA blr-32-gd3-3s	10200602	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
blr-32-gd3-4	CUB Boiler	Superior Boiler Works	6-5-6250-5150	12183	52.5 MMBtu/hr	52.5 MMBtu/hr		1994	NA blr-32-gd3-4s	10200602	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
blr-32-gd3-5	CUB Boiler	Superior Boiler Works	6-5-6250-5150	12466	52.5 MMBtu/hr	52.5 MMBtu/hr		1995	NA blr-32-gd3-5s	10200602	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
blr-32-gd3-6	CUB Boiler	Superior Boiler Works	6-5-6250-5150	12254	52.5 MMBtu/hr	52.5 MMBtu/hr		1995	NA blr-32-gd3-6s	10200602	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
BCP Boiler 7	BCP Boiler	TBD	TBD	TBD	8.37 MMBtu/hr	8.37 MMBtu/hr	TBD	TBD	NA BCP Boiler 7s	10200602	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
BCP Boiler 8	BCP Boiler	TBD	TBD	TBD	29.3 MMBtu/hr	29.3 MMBtu/hr	TBD	TBD	NA BCP Boiler 8s	10200602	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
BCP Boiler 9	BCP Boiler	TBD	TBD	TBD	29.3 MMBtu/hr	29.3 MMBtu/hr	TBD	TBD	NA BCP Boiler 9s	10200602	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
BCP Boiler 10	BCP Boiler	TBD	TBD	TBD	29.3 MMBtu/hr	29.3 MMBtu/hr	TBD	TBD	NA BCP Boiler 10s	10200602	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
BCP Boiler 11	BCP Boiler	TBD	TBD	TBD	29.3 MMBtu/hr	29.3 MMBtu/hr	TBD	TBD	NA BCP Boiler 11s	10200602	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
CUB	Cooling Tower	Alpha	UL-3030	NA	7 500 gpm	7 500 gpm	NA	NA	NA	38500101	X Existing (unchanged) <input type="checkbox"/> New/Additional	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit	NA

Unit Number ¹	Source Description	Manufacturer	Model #	Serial #	Maximum or Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture or Reconstruction ²		Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	Applicable State & Federal Regulation(s) (i.e. 20.2.X, JJJJ, ...)	Replacing Unit No.
							Date of Installation /Construction ²	Emissions vented to Stack #					
CT1	Cooling Tower	Southwest	75-19P6	NA	7,500 gpm	7,500 gpm	NA	NA	CUB CT1s	38500101	<input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
CUB CT2	Cooling Tower	Alpha Southwest	UL-3030-75-19P6	NA	7,500 gpm	7,500 gpm	NA	NA	CUB CT2s	38500101	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
CUB CT3	Cooling Tower	Alpha Southwest	UL-3030-75-19P6	NA	7,500 gpm	7,500 gpm	NA	NA	CUB CT3s	38500101	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
CUB CT4	Cooling Tower	Alpha Southwest	UL-3030-75-19P6	NA	7,500 gpm	7,500 gpm	NA	NA	CUB CT4s	38500101	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
CUB CT5	Cooling Tower	Alpha Southwest	UL-3030-75-19P6	NA	7,500 gpm	7,500 gpm	NA	NA	CUB CT5s	38500101	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
CUB CT6	Cooling Tower	Alpha Southwest	UL-3030-75-19P6	NA	7,500 gpm	7,500 gpm	NA	NA	CUB CT6s	38500101	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
CUB CT7	Cooling Tower	Alpha Southwest	UL-3030-75-19P6	NA	7,500 gpm	7,500 gpm	NA	NA	CUB CT7s	38500101	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
CUB CT8	Cooling Tower	Alpha Southwest	UL-3030-75-19P6	NA	7,500 gpm	7,500 gpm	NA	NA	CUB CT8s	38500101	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
CUB CT9	Cooling Tower	Alpha Southwest	UL-3030-75-19P6	NA	7,500 gpm	7,500 gpm	NA	NA	CUB CT9s	38500101	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
CUB CT10	Cooling Tower	Alpha Southwest	UL-3030-75-19P6	NA	7,500 gpm	7,500 gpm	NA	NA	CUB CT10s	38500101	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
CUB CT11	Cooling Tower	Alpha Southwest	UL-3030-75-19P6	NA	7,500 gpm	7,500 gpm	NA	NA	CUB CT11s	38500101	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
CUB CT12	Cooling Tower	Alpha Southwest	UL-3030-75-19P6	NA	7,500 gpm	7,500 gpm	NA	NA	CUB CT12s	38500101	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
NEC7 CT1	Cooling Tower	Ingersoll Rand	5KS449D P7010AN	TM6232026	6,000 gpm	6,000 gpm	NA	NA	NEC7 CT1s	38500101	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA
NEC7 CT2	Cooling Tower	Ingersoll Rand	5KS449D P7010N	N66023035	6,000 gpm	6,000 gpm	NA	NA	NEC7 CT2s	38500101	X Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	NA

Unit Number ¹	Source Description	Manufacturer	Model #	Serial #	Maximum or Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture or Reconstruction ²		Source Classification Code (SCC)	For Each Piece of Equipment, Check One	Applicable State & Federal Regulation(s) (i.e. 20.2.X, JJJJ, ...)	Replacing Unit No.
							Date of Installation /Construction ²	Emissions vented to Stack #				
NEC7 CT3	Cooling Tower	Ingersoll Rand	5KS449D P7010N	PSH6224032	6,000 gpm	6,000 gpm	NA	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		NA
							NA	NEC7 CT3s				
NEC7 CT4	Cooling Tower	Flowserve	NA	NA	3,000 gpm	3,000 gpm	NA	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		NA
							NA	NEC7 CT4s				
NEC9 CT1	Cooling Tower	Ingersoll Rand	NA	NA	6,000 gpm	6,000 gpm	NA	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		NA
							NA	NEC9 CT1s				
NEC9 CT2	Cooling Tower	Ingersoll Rand	NA	NA	6,000 gpm	6,000 gpm	NA	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		NA
							NA	NEC9				
NEC9 CT3	Cooling Tower	Ingersoll Rand	5KS449D P7010AN	SH6221031	6,000 gpm	6,000 gpm	NA	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		NA
							NA	NEC9 CT3s				
NEC9 CT4	Cooling Tower	Ingersoll Rand	5KS449D P7010AN	SH6222032	6,000 gpm	6,000 gpm	NA	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		NA
							NA	NEC9 CT4s				
NEC9 CT5	Cooling Tower	Ingersoll Rand	SK5449D P7010AN	SH6225032	6,000 gpm	6,000 gpm	NA	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		NA
							NA	NEC9 CT5s				
NEC9 CT6	Cooling Tower	Ingersoll Rand	SK54490 DP7010N	NFF021033	6,000 gpm	6,000 gpm	NA	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		NA
							NA	NEC9 CT6s				
NEC9 CT7	Cooling Tower	Ingersoll Rand	NA	NA	6,000 gpm	6,000 gpm	NA	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		NA
							NA	NEC9 CT7s				
NEC9 CT8	Cooling Tower	Ingersoll Rand	NA	NA	6,000 gpm	6,000 gpm	NA	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		NA
							NA	NEC9 CT8s				
BCP CT1	Cooling Tower	TBD	TBD	TBD	10,000 gpm	10,000 gpm	TBD	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		NA
							TBD	BCP CT1s				
BCP CT2	Cooling Tower	TBD	TBD	TBD	10,000 gpm	10,000 gpm	TBD	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		NA
							TBD	BCP CT2s				
BCP CT3	Cooling Tower	TBD	TBD	TBD	10,000 gpm	10,000 gpm	TBD	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		NA
							TBD	BCP CT3s				
BCP CT4	Cooling Tower	TBD	TBD	TBD	10,000 gpm	10,000 gpm	TBD	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		NA
							TBD	BCP CT4s				

Unit Number ¹	Source Description	Manufacturer	Model #	Serial #	Maximum or Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture or Reconstruction ²		Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	Applicable State & Federal Regulation(s) (i.e. 20.2X, JJJJ, ...)	Replacing Unit No.
							Date of Installation /Construction ²	Emissions vented to Stack #					
BCP CT5	Cooling Tower	TBD	TBD	TBD	10,000 gpm	10,000 gpm	TBD	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		NA	
BCP CT6	Cooling Tower	TBD	TBD	TBD	10,000 gpm	10,000 gpm	TBD	BCP CT5s	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		NA	
BCP CT7	Cooling Tower	TBD	TBD	TBD	10,000 gpm	10,000 gpm	TBD	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		NA	
BCP CT8	Cooling Tower	TBD	TBD	TBD	10,000 gpm	10,000 gpm	TBD	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		NA	
BCP CT9	Cooling Tower	TBD	TBD	TBD	10,000 gpm	10,000 gpm	TBD	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		NA	
BCP CT10	Cooling Tower	TBD	TBD	TBD	10,000 gpm	10,000 gpm	TBD	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		NA	
APCI CT1	Cooling Tower	Marley	NC9001 GM	65714-NC9001GM-94	1,640 gmp	1,640 gmp	NA	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		NA	
							NA	APCI CT1s					
APCI CT2	Cooling Tower	Marley	NC9001 GM	65714-NC9001GM-94	1,640 gmp	1,640 gmp	NA	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		NA	
							NA	APCI CT2s					
APCI CT3	Cooling Tower	TBD	TBD	TBD	10,000 gpm	10,000 gpm	TBD	NA	38500101	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		NA	
							TBD	APCI CT3s					
Fab 11	Semiconductor Manufacturing	NA	NA	NA	See Section 20	See Section 20		all RTOs and Scrubbers in Table 2G	31306500	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		NA	
							1985	all RTO and Scrubber stacks in Table 2G					

¹ Unit numbers must correspond to unit numbers in the previous permit unless a complete cross reference table of all units in both permits is provided.

² Specify dates required to determine regulatory applicability.

³ To properly account for power conversion efficiencies, generator set rated capacity shall be reported as the rated capacity of the engine in horsepower, not the kilowatt capacity of the generator set.

Table 2-B: Insignificant Activities¹ (20.2.70 NMAC) OR Exempted Equipment (20.2.72 NMAC)

All 20.2.70 NMAC (Title V) applications must list all Insignificant Activities in this table. All 20.2.72 NMAC applications must list Exempted Equipment in this table. If equipment listed on this table is exempt under 20.2.72.202.B.5, include emissions calculations and emissions totals for 202.B.5 "similar functions" units, operations, and activities in Section 6, Calculations. Equipment and activities exempted under 20.2.72.202 NMAC may not necessarily be Insignificant under 20.2.70 NMAC (and vice versa). Unit & stack numbering must be consistent throughout the application package. Per Exemptions Policy 02-012.00 (see http://www.nmenv.state.nm.us/aqb/permit/aqb_pol.html), 20.2.72.202.B NMAC Exemptions do not apply, but 20.2.72.202.A NMAC exemptions do apply to NOI facilities under 20.2.73 NMAC. List 20.2.72.301.D.4 NMAC Auxiliary Equipment for Streamline applications in Table 2-A. The List of Insignificant Activities (for TV) can be found online at <http://www.nmenv.state.nm.us/aqb/forms/InsignificantListTitleV.pdf>. TV sources may elect to enter both TV Insignificant Activities and Part 72 Exemptions on this form.

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²	For Each Piece of Equipment, Check One
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²	
GEN-95-AJ1-01-01	Emergency Generator	Cummins	KTA50GSGC2	1100	20.2.72.202.B.3		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			33112628	KW	IA List Item #7	6/1/1980	
GEN-95-AH1-01-01	Emergency Generator	Cummins	1250 DFLC	1250	20.2.72.202.B.3		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			H950583557	KW	IA List Item #7	6/1/1980	
GEN-95-AH1-02-01	Emergency Generator	Cummins	NTTA855GS2	350	20.2.72.202.B.3		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			30307942	KW	IA List Item #7	6/1/1980	
GEN-95-AH1-03-01	Emergency Generator	Cummins	KTA2300GS	750	20.2.72.202.B.3		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			33103711	KW	IA List Item #7	6/1/1980	
GEN-95-BW1-02-01	Emergency Generator	Caterpillar	KTA50GSGC2	1100	20.2.72.202.B.3		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			33113747	KW	IA List Item #7	1985	
GEN-95-BW1-03-01	Emergency Generator	Caterpillar	3516	1100	20.2.72.202.B.3		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			04XF00474	KW	IA List Item #7	1998	
GEN-95-BW1-01-01	Emergency Generator	Caterpillar	KTA50GSGC2	1100	20.2.72.202.B.3		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			33112628	KW	IA List Item #7	1985	
GEN-95-HE1-01-01	Emergency Generator	Detroit	16V149TA	1400	20.2.72.202.B.3		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			16E0010589	KW	IA List Item #7	1985	
GEN-95-HE1-03-01	Emergency Generator	Caterpillar	3516	2000	20.2.72.202.B.3		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			04XF00473	KW	IA List Item #7	1990	
GEN-95-HE1-02-01	Emergency Generator	Caterpillar	3516	2000	20.2.72.202.B.3		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			04XF00474	KW	IA List Item #7	6/12/1995	
GEN-95-GF1-01-01	Emergency Generator	Caterpillar	3516	1700	20.2.72.202.B.3		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			025Z03766	KW	IA List Item #7	1993	
GEN-95-GF1-02-01	Emergency Generator	Caterpillar	3516	1700	20.2.72.202.B.3		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			025Z03763	KW	IA List Item #7	1993	
GEN-95-GF1-03-01	Emergency Generator	Caterpillar	3516	1700	20.2.72.202.B.3		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			025Z03768	KW	IA List Item #7	1993	
GEN-95-GF1-04-01	Emergency Generator	Caterpillar	3516	1900	20.2.72.202.B.3		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			06HN00105	KW	IA List Item #7	1993	

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²	For Each Piece of Equipment, Check One
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²	
GEN-95-GF1-05-01	Emergency Generator	Caterpillar	C-175	3000	20.2.72.202.B.3		X Existing (unchanged) <input type="checkbox"/> To be Removed
			WYB00177	KW	IA List Item #7	2009	<input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
GEN-95-GF1-06-01	Emergency Generator	Caterpillar	C-175	3000	20.2.72.202.B.3		<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed
			WYB00176	KW	IA List Item #7	2009	<input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
GEN-95-GG1-01-01	Emergency Generator	Caterpillar	3516b	2133	20.2.72.202.B.3		X Existing (unchanged) <input type="checkbox"/> To be Removed
			07RN01862	KW	IA List Item #7	2001	<input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
GEN-95-GG1-02-01	Emergency Generator	Caterpillar	3516b	2133	20.2.72.202.B.3		X Existing (unchanged) <input type="checkbox"/> To be Removed
			07RN01868	KW	IA List Item #7	2001	<input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
GEN-95-GG1-03-01	Emergency Generator	Caterpillar	3516b	2133	20.2.72.202.B.3		X Existing (unchanged) <input type="checkbox"/> To be Removed
			07RN01869	KW	IA List Item #7	2001	<input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
GEN-95-GG1-04-01	Emergency Generator	Caterpillar	3516b	2133	20.2.72.202.B.3		X Existing (unchanged) <input type="checkbox"/> To be Removed
			07RN01864	KW	IA List Item #7	2001	<input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
NFP	Fire Pump	Caterpillar	3406B	482	20.2.72.202.A.4	1995	X Existing (unchanged) <input type="checkbox"/> To be Removed
			6TB23377	hp	Trivial Activity #5	1995	<input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
SFP	Fire Pump	Cummins	CFP11E-F20	360	20.2.72.202.A.4	Apr-08	X Existing (unchanged) <input type="checkbox"/> To be Removed
			35225690	hp	Trivial Activity #5	May-08	<input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
GWH-701	Water Heater	Aerco KC	AERCO 35082	1,000,000	20.2.72.202.B.1	2001	X Existing (unchanged) <input type="checkbox"/> To be Removed
			G-01-158	BTU/hr	IA List Item #3		<input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
GWH-702	Water Heater	Aerco KC	AERCO 35150	1,000,000	20.2.72.202.B.1	2001	X Existing (unchanged) <input type="checkbox"/> To be Removed
			G-01-195	BTU/hr	IA List Item #3		<input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
GWH-703	Water Heater	Aerco KC	AERCO 35151	1,000,000	20.2.72.202.B.1	2001	X Existing (unchanged) <input type="checkbox"/> To be Removed
			G-01-196	BTU/hr	IA List Item #3		<input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced

¹ Insignificant activities exempted due to size or production rate are defined in 20.2.70.300.D.6, 20.2.70.7.Q NMAC, and the NMED/AQB List of Insignificant Activities, dated September 15, 2008. Emissions from these insignificant activities do not need to be reported, unless specifically requested.

² Specify date(s) required to determine regulatory applicability.

Table 2-C: Emissions Control Equipment

Unit and stack numbering must correspond throughout the application package. Only list control equipment for TAPs if the TAP's maximum uncontrolled emissions rate is over its respective threshold as listed in 20.2.72 NMAC, Subpart V, Tables A and B.

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s) ¹	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
RRNP-VOC138-1-120	Thermal Oxidizer	10/1/2008	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
RRNP-VOC138-2-120	Thermal Oxidizer	10/1/2008	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
RRNP-VOC138-3-120	Thermal Oxidizer	1/12/2010	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
F11F-VOC138-1-120	Thermal Oxidizer	6/27/2011	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
F11F-VOC138-2-120	Thermal Oxidizer	6/27/2011	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
F11B-VOC138-1-120	Thermal Oxidizer	6/27/2011	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
F11B-VOC138-2-120s	Thermal Oxidizer	6/27/2011	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
F11Xe Munters 1	Thermal Oxidizer	TBD	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
F11Xe Munters 2	Thermal Oxidizer	TBD	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
F11Xe Munters 3	Thermal Oxidizer	TBD	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
F11Xe Munters 5	Thermal Oxidizer	TBD	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
F11Xe Munters 6	Thermal Oxidizer	TBD	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
F11Xe Munters 11	Thermal Oxidizer	TBD	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
F11Xe Munters 12	Thermal Oxidizer	TBD	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
F11Xe Munters 13	Thermal Oxidizer	TBD	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
F11Xe Munters 14	Thermal Oxidizer	TBD	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
F11Xe Munters 15	Thermal Oxidizer	TBD	Organic solvents including VOCs/HAPs	Fab 11	97%	Stack Testing
OX293-0-70	Ammonia Treatment System	2/16/2011	Ammonia and NOx	Fab 11	99% NH3, 98% NOx	Stack Testing
F11Xe ATS 2	Ammonia Treatment System	TBD	Ammonia and NOx	Fab 11	99% NH3, 98% NOx	Stack Testing
F11Xe ATS 3	Ammonia Treatment System	TBD	Ammonia and NOx	Fab 11	99% NH3, 98% NOx	Stack Testing

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s) ¹	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
F11Xe BSSW 1	Bulk Specialty Solvent Waste Treatment	TBD	Organic solvents including VOCs/HAPs	Fab 11	98%	TBD
sc-12-cr1-1	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-12-cr1-2	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
RRGC_SC-12-GC1-1	Acid Gas Scrubber	Apr-96	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
RRGC_SC-12-GC1-2	Acid Gas Scrubber	6/12/2006	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
RRGC_SC-133-3-100	Acid Gas Scrubber	Dec-03	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
RRGC_SC-133-4-100	Acid Gas Scrubber	Dec-05	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
f9-sc-5-1-3	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-12-np2-1	Acid Gas Scrubber	1/9/2002	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-12-np2-2	Acid Gas Scrubber	1/9/2002	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-12-np2-3	Acid Gas Scrubber	1/9/2002	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-12-np2-4	Acid Gas Scrubber	11/1/2005	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-40-np2-1	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-40-np2-2	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-40-np2-3	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-40-It2-1	Acid Gas Scrubber	6/5/2003	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-12-It2-1	Acid Gas Scrubber	1/9/2002	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-12-It2-2	Acid Gas Scrubber	1/9/2002	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-12-It2-3	Acid Gas Scrubber	10/6/2005	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-12-fb1-1	Acid Gas Scrubber	5/28/1996	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-12-fb1-2	Acid Gas Scrubber	Jun-96	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-12-fb1-3	Acid Gas Scrubber	Jun-96	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-12-fb1-4	Acid Gas Scrubber	Jun-96	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-12-fb1-5	Acid Gas Scrubber	Jun-96	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
RRFB-SC142-1-00	Acid Gas Scrubber	Jul-09	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s) ¹	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
RRFB-SC142-2-00	Acid Gas Scrubber	Jul-09	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
RRFD-SC142-1-00	Acid Gas Scrubber	Jul-09	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-12-fd1-3	Acid Gas Scrubber	Jun-96	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-12-fd1-6	Acid Gas Scrubber	6/16/1997	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
sc-40-lt2-2	Acid Gas Scrubber	5/9/2006	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
F11Xe Scrubber 1	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
F11Xe Scrubber 2	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
F11Xe Scrubber 3	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
F11Xe Scrubber 4	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
F11Xe Scrubber 5	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
F11Xe Scrubber 6	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
F11Xe Scrubber 7	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
F11Xe Scrubber 8	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
F11Xe Scrubber 9	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
F11Xe Scrubber 10	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
F11Xe Scrubber 11	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
PUB Scrubber 1	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
PUB Scrubber 2	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
PUB Scrubber 3	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing
PUB Scrubber 4	Acid Gas Scrubber	TBD	Inorganic acids including HAPs	Fab 11	70% HF, 69% HCl, 53% Cl2	Stack Testing

¹ List each control device on a separate line. For each control device, list all emission units controlled by the control device.

Table 2-E: Requested Allowable Emissions

Unit & stack numbering must be consistent throughout the application package. For each unit with flashing, list tank-flashing emissions estimates as a separate line item (20.2.70.300.D.5 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.B.6, & 20.2.74.301 NMAC). Fill all cells in this table with the emission numbers or a "-" symbol. A "--" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed with a minimum of two significant figures¹. If there are any significant figures to the left of a decimal point, there shall be no more than one significant figure to the right of the decimal point. Please do not change the column widths on this table.

Unit No.	NOx		CO		VOC		SOx		TSP ²		PM10 ²		PM2.5 ²		H ₂ S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
ecs-boi-97 (natural gas)	2.92	-	5.6	-	-	-	0.03	-	0.24	-	0.24	-	0.24	-	-	-	-	-
ecs-boi-97 (fuel oil)	7.8	-	1.9	-	-	-	27.5	-	0.8	-	0.8	-	0.8	-	-	-	-	-
ecs-boi-98 (natural gas)	2.92	-	5.6	-	-	-	0.03	-	0.24	-	0.24	-	0.24	-	-	-	-	-
ecs-boi-98 (fuel oil)	7.8	-	1.9	-	-	-	27.5	-	0.8	-	0.8	-	0.8	-	-	-	-	-
blr-32-gd3-1 (natural gas)	2.92	-	5.6	-	-	-	0.03	-	0.24	-	0.24	-	0.24	-	-	-	-	-
blr-32-gd3-1 (fuel oil)	7.8	-	1.9	-	-	-	27.5	-	0.8	-	0.8	-	0.8	-	-	-	-	-
blr-32-gd3-2 (natural gas)	2.92	-	5.6	-	-	-	0.03	-	0.24	-	0.24	-	0.24	-	-	-	-	-
blr-32-gd3-2 (fuel oil)	7.8	-	1.9	-	-	-	27.5	-	0.8	-	0.8	-	0.8	-	-	-	-	-
blr-32-gd3-3 (natural gas)	2.92	-	5.6	-	-	-	0.03	-	0.24	-	0.24	-	0.24	-	-	-	-	-
blr-32-gd3-3 (fuel oil)	7.8	-	1.9	-	-	-	27.5	-	0.8	-	0.8	-	0.8	-	-	-	-	-
blr-32-gd3-4 (natural gas)	2.92	-	5.6	-	-	-	0.03	-	0.24	-	0.24	-	0.24	-	-	-	-	-
blr-32-gd3-4 (fuel oil)	7.8	-	1.9	-	-	-	27.5	-	0.8	-	0.8	-	0.8	-	-	-	-	-
blr-32-gd3-5 (natural gas)	2.92	-	5.6	-	-	-	0.03	-	0.24	-	0.24	-	0.24	-	-	-	-	-
blr-32-gd3-5 (fuel oil)	7.8	-	1.9	-	-	-	27.5	-	0.8	-	0.8	-	0.8	-	-	-	-	-
blr-32-gd3-6 (natural gas)	2.92	-	5.6	-	-	-	0.03	-	0.24	-	0.24	-	0.24	-	-	-	-	-
blr-32-gd3-6 (fuel oil)	7.8	-	1.9	-	-	-	27.5	-	0.8	-	0.8	-	0.8	-	-	-	-	-
BCP Boiler 7 (natural gas)	2.92	-	5.6	-	-	-	0.03	-	0.24	-	0.24	-	0.24	-	-	-	-	-
BCP Boiler 7 (#2 fuel oil)	7.8	-	1.9	-	-	-	27.5	-	0.8	-	0.8	-	0.8	-	-	-	-	-
BCP Boiler 8 (natural gas)	2.92	-	5.6	-	-	-	0.03	-	0.24	-	0.24	-	0.24	-	-	-	-	-
BCP Boiler 8 (#2 fuel oil)	7.8	-	1.9	-	-	-	27.5	-	0.8	-	0.8	-	0.8	-	-	-	-	-

Unit No.	NOx		CO		VOC		SOx		TSP ²		PM10 ²		PM2.5 ²		H ₂ S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
BCP Boiler 9 (natural gas)	2.92	-	5.6	-	-	-	0.03	-	0.24	-	0.24	-	0.24	-	-	-	-	-
BCP Boiler 9 (#2 fuel oil)	7.8	-	1.9	-	-	-	27.5	-	0.8	-	0.8	-	0.8	-	-	-	-	-
BCP Boiler 10 (natural gas)	2.92	-	5.6	-	-	-	0.03	-	0.24	-	0.24	-	0.24	-	-	-	-	-
BCP Boiler 10 (#2 fuel oil)	7.8	-	1.9	-	-	-	27.5	-	0.8	-	0.8	-	0.8	-	-	-	-	-
BCP Boiler 11 (natural gas)	2.92	-	5.6	-	-	-	0.03	-	0.24	-	0.24	-	0.24	-	-	-	-	-
BCP Boiler 11 (#2 fuel oil)	7.8	-	1.9	-	-	-	27.5	-	0.8	-	0.8	-	0.8	-	-	-	-	-
CUB CT1	-	-	-	-	-	-	-	-	0.16	-	0.11	-	0.001	-	-	-	-	-
CUB CT2	-	-	-	-	-	-	-	-	0.16	-	0.11	-	0.001	-	-	-	-	-
CUB CT3	-	-	-	-	-	-	-	-	0.16	-	0.11	-	0.001	-	-	-	-	-
CUB CT4	-	-	-	-	-	-	-	-	0.16	-	0.11	-	0.001	-	-	-	-	-
CUB CT5	-	-	-	-	-	-	-	-	0.16	-	0.11	-	0.001	-	-	-	-	-
CUB CT6	-	-	-	-	-	-	-	-	0.16	-	0.11	-	0.001	-	-	-	-	-
CUB CT7	-	-	-	-	-	-	-	-	0.16	-	0.11	-	0.001	-	-	-	-	-
CUB CT8	-	-	-	-	-	-	-	-	0.16	-	0.11	-	0.001	-	-	-	-	-
CUB CT9	-	-	-	-	-	-	-	-	0.16	-	0.11	-	0.001	-	-	-	-	-
CUB CT10	-	-	-	-	-	-	-	-	0.16	-	0.11	-	0.001	-	-	-	-	-
CUB CT11	-	-	-	-	-	-	-	-	0.16	-	0.11	-	0.001	-	-	-	-	-
CUB CT12	-	-	-	-	-	-	-	-	0.16	-	0.11	-	0.001	-	-	-	-	-
NEC7 CT1	-	-	-	-	-	-	-	-	1.32	-	0.9	-	0.008	-	-	-	-	-
NEC7 CT2	-	-	-	-	-	-	-	-	1.32	-	0.9	-	0.008	-	-	-	-	-
NEC7 CT3	-	-	-	-	-	-	-	-	1.32	-	0.9	-	0.008	-	-	-	-	-
NEC7 CT4	-	-	-	-	-	-	-	-	0.66	-	0.45	-	0.004	-	-	-	-	-
NEC9 CT1	-	-	-	-	-	-	-	-	1.32	-	0.9	-	0.008	-	-	-	-	-
NEC9 CT2	-	-	-	-	-	-	-	-	1.32	-	0.9	-	0.008	-	-	-	-	-
NEC9 CT3	-	-	-	-	-	-	-	-	1.32	-	0.9	-	0.008	-	-	-	-	-
NEC9 CT4	-	-	-	-	-	-	-	-	1.32	-	0.9	-	0.008	-	-	-	-	-
NEC9 CT5	-	-	-	-	-	-	-	-	1.32	-	0.9	-	0.008	-	-	-	-	-
NEC9 CT6	-	-	-	-	-	-	-	-	1.32	-	0.9	-	0.008	-	-	-	-	-
NEC9 CT7	-	-	-	-	-	-	-	-	1.32	-	0.9	-	0.008	-	-	-	-	-
NEC9 CT8	-	-	-	-	-	-	-	-	1.32	-	0.9	-	0.008	-	-	-	-	-
BCP CT1	-	-	-	-	-	-	-	-	0.22	-	0.15	-	0.014	-	-	-	-	-
BCP CT2	-	-	-	-	-	-	-	-	0.22	-	0.15	-	0.014	-	-	-	-	-
BCP CT3	-	-	-	-	-	-	-	-	0.22	-	0.15	-	0.014	-	-	-	-	-
BCP CT4	-	-	-	-	-	-	-	-	0.22	-	0.15	-	0.014	-	-	-	-	-
BCP CT5	-	-	-	-	-	-	-	-	0.22	-	0.15	-	0.014	-	-	-	-	-
BCP CT6	-	-	-	-	-	-	-	-	0.22	-	0.15	-	0.014	-	-	-	-	-

Unit No.	NOx		CO		VOC		SOx		TSP ²		PM10 ²		PM2.5 ²		H ₂ S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
BCP CT7	-	-	-	-	-	-	-	-	0.22	-	0.15	-	0.014	-	-	-	-	-
BCP CT8	-	-	-	-	-	-	-	-	0.22	-	0.15	-	0.014	-	-	-	-	-
BCP CT9	-	-	-	-	-	-	-	-	0.22	-	0.15	-	0.014	-	-	-	-	-
BCP CT10	-	-	-	-	-	-	-	-	0.22	-	0.15	-	0.014	-	-	-	-	-
APCI	-	-	-	-	-	-	-	-	0.08	-	0.2	-	0.001	-	-	-	-	-
APCI	-	-	-	-	-	-	-	-	0.08	-	0.2	-	0.001	-	-	-	-	-
APCI	-	-	-	-	-	-	-	-	0.08	-	0.2	-	0.001	-	-	-	-	-
Fab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals	139	PSEL	98	PSEL	-	PSEL	358	-	33	PSEL	27	PSEL	14	PSEL	-	-	-	-

Table 2-G: Stack Exit and Fugitive Emission Rates for Special Stacks

I have elected to leave this table blank because this facility does not have any stacks/vents that split emissions from a single source or combine emissions from more than one source listed in table 2-A. Additionally, the emission rates of all stacks match the Requested allowable emission rates stated in Table 2-E.

Use this table to list stack emissions (requested allowable) from split and combined stacks. List Toxic Air Pollutants (TAPs) and Hazardous Air Pollutants (HAPs) in Table 2-I. List all fugitives that are associated with the normal, routine, and non-emergency operation of the facility. List tank-flashing emissions estimates as a separate line item. Unit and stack numbering must correspond throughout the application package. Refer to Table 2-E for instructions on use of the “-” symbol and on significant figures.

Stack No.	Serving Unit Number(s) from Table 2-A	NOx		CO		VOC		SOx		TSP		PM10		PM2.5		<input type="checkbox"/> H ₂ S or <input type="checkbox"/> Lead	
		lb/hr	ton/yr	lb/hr	ton/yr												
RRNP-VOC138-1-120	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
RRNP-VOC138-2-120	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
RRNP-VOC138-3-120	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
F11F-VOC138-1-120	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
F11F-VOC138-2-120	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
F11B-VOC138-1-120	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
F11B-VOC138-2-120s	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
F11Xe Munters 1	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
F11Xe Munters 2	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
F11Xe Munters 3	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
F11Xe Munters 5	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
F11Xe Munters 6	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
F11Xe Munters 11	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
F11Xe Munters 12	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
F11Xe Munters 13	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
F11Xe Munters 14	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-
F11Xe Munters 15	Fab 11	1	-	0.6	-	-	-	0.002	-	1	-	1	-	0.5	-	-	-

Stack No.	Serving Unit Number(s) from Table 2-A	NOx		CO		VOC		SOx		TSP		PM10		PM2.5		☐ H ₂ S or ☐ Lead	
		lb/hr	ton/yr	lb/hr	ton/yr												
OX293-0-70	Fab 11	1	-	1	-	-	-	0.002	-	0.05	-	0.05	-	0.05	-	-	-
F11Xe ATS 2	Fab 11	1	-	1	-	-	-	0.002	-	0.05	-	0.05	-	0.05	-	-	-
F11Xe ATS 3	Fab 11	1	-	1	-	-	-	0.002	-	0.05	-	0.05	-	0.05	-	-	-
F11Xe BSSW 1	Fab 11	1	-	1	-	-	-	0.002	-	0.05	-	0.05	-	0.05	-	-	-
sc-12-cr1-1	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-12-cr1-2	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
RRGC_SC-12- GC1-1	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
RRGC_SC-12- GC1-2	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
RRGC_SC- 133-3-100	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
RRGC_SC- 133-4-100	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
f9-sc-5-1-3	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-12-np2-1	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-12-np2-2	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-12-np2-3	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-12-np2-4	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-40-np2-1	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-40-np2-2	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-40-np2-3	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-40-It2-1	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-12-It2-1	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-12-It2-2	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-12-It2-3	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-12-fb1-1	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-12-fb1-2	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-12-fb1-3	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-12-fb1-4	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-12-fb1-5	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
RRFB-SC142- 1-00	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
RRFB-SC142- 2-00	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
RRFD-SC142- 1-00	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-12-fd1-3	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-12-fd1-6	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
sc-40-It2-2	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
F11Xe Scrubber 1	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
F11Xe Scrubber 2	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
F11Xe Scrubber 3	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-

Stack No.	Serving Unit Number(s) from Table 2-A	NOx		CO		VOC		SOx		TSP		PM10		PM2.5		<input type="checkbox"/> H ₂ S or <input type="checkbox"/> Lead	
		lb/hr	ton/yr	lb/hr	ton/yr												
F11Xe Scrubber 4	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
F11Xe Scrubber 5	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
F11Xe Scrubber 6	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
F11Xe Scrubber 7	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
F11Xe Scrubber 8	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
F11Xe Scrubber 9	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
F11Xe Scrubber 10	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
F11Xe Scrubber 11	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
PUB Scrubber 1	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
PUB Scrubber 2	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
PUB Scrubber 3	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
PUB Scrubber 4	Fab 11	-	-	-	-	-	-	-	-	0.2	-	0.2	-	0.2	-	-	-
Totals:		21	PSEL	14.2	PSEL	-	PSEL	0.042	PSEL	26	PSEL	26	PSEL	17.5	PSEL	-	-

Table 2-H: Stack Exit Conditions

Unit and stack numbering must correspond throughout the application package.

Stack Number	Serving Unit Number(s) from Table 2-A	Orientation (H=Horizontal V=Vertical)	Rain Caps (Yes or No)	Height Above Ground (m)	Temp. (F)	Flow Rate		Moisture by Volume (%)	Velocity (ft/sec)	Inside Diameter or
						(acfs)	(dscfs)			L x W (ft)
ecs-boi-97s	ecs-boi-97	V	No	15.5	300	14800			23	3.7
ecs-boi-98s	ecs-boi-98	V	No	15.5	300	14800			23	3.7
blr-32-gd3-1s	blr-32-gd3-1	V	No	17.4	300	14800			23	3.7
blr-32-gd3-2s	blr-32-gd3-2	V	No	17.4	300	14800			23	3.7
blr-32-gd3-3s	blr-32-gd3-3	V	No	17.4	300	14800			23	3.7
blr-32-gd3-4s	blr-32-gd3-4	V	No	17.4	300	14800			23	3.7
blr-32-gd3-5s	blr-32-gd3-5	V	No	17.4	300	14800			23	3.7
blr-32-gd3-6s	blr-32-gd3-6	V	No	17.4	300	14800			23	3.7
BCP Boiler 7s	BCP Boiler 7	V	No	18.3	300	247			23	3.7
BCP Boiler 8s	BCP Boiler 8	V	No	18.3	300	247			23	3.7
BCP Boiler 9s	BCP Boiler 9	V	No	18.3	300	247			23	3.7
BCP Boiler 10s	BCP Boiler 10	V	No	18.3	300	247			23	3.7
BCP Boiler 11s	BCP Boiler 11	V	No	18.3	300	247			23	3.7
CUB CT1s	CUB CT1	V	No	10	78	511282			21	23
CUB CT2s	CUB CT2	V	No	10	78	511282			21	23
CUB CT3s	CUB CT3	V	No	10	78	511282			21	23
CUB CT4s	CUB CT4	V	No	10	78	511282			21	23
CUB CT5s	CUB CT5	V	No	10	78	511282			21	23
CUB CT6s	CUB CT6	V	No	10	78	511282			21	23
CUB CT7s	CUB CT7	V	No	10	78	511282			21	23
CUB CT8s	CUB CT8	V	No	10	78	511282			21	23
CUB CT9s	CUB CT9	V	No	10	78	511282			21	23
CUB CT10s	CUB CT10	V	No	10	78	511282			21	23

Stack Number	Serving Unit Number(s) from Table 2-A	Orientation (H=Horizontal V=Vertical)	Rain Caps (Yes or No)	Height Above Ground (m)	Temp. (F)	Flow Rate		Moisture by Volume (%)	Velocity (ft/sec)	Inside Diameter or
						(acfs)	(dscfs)			L x W (ft)
CUB CT11s	CUB CT11	V	No	10	78	511282			21	23
CUB CT12s	CUB CT12	V	No	10	78	511282			21	23
NEC7 CT1s	NEC7 CT1	V	No	10	78	400382			16	23
NEC7 CT2s	NEC7 CT2	V	No	10	78	400382			16	23
NEC7 CT3s	NEC7 CT3	V	No	10	78	400382			16	23
NEC7 CT4s	NEC7 CT4	V	No	10	78	400382			16	23
NEC9 CT1s	NEC9 CT1	V	No	10	78	400382			16	23
NEC9 CT2s	NEC9 CT2	V	No	10	78	400382			16	23
NEC9 CT3s	NEC9 CT3	V	No	10	78	400382			16	23
NEC9 CT4s	NEC9 CT4	V	No	10	78	400382			16	23
NEC9 CT5s	NEC9 CT5	V	No	10	78	400382			16	23
NEC9 CT6s	NEC9 CT6	V	No	10	78	400382			16	23
NEC9 CT7s	NEC9 CT7	V	No	10	78	400382			16	23
NEC9 CT8s	NEC9 CT8	V	No	10	78	400382			16	23
BCP CT1s	BCP CT1	V	No	15.2	78	511282			21	23
BCP CT2s	BCP CT2	V	No	15.2	78	511282			21	23
BCP CT3s	BCP CT3	V	No	15.2	78	511282			21	23
BCP CT4s	BCP CT4	V	No	15.2	78	511282			21	23
BCP CT5s	BCP CT5	V	No	15.2	78	511282			21	23
BCP CT6s	BCP CT6	V	No	15.2	78	511282			21	23
BCP CT7s	BCP CT7	V	No	15.2	78	511282			21	23
BCP CT8s	BCP CT8	V	No	15.2	78	511282			21	23
BCP CT9s	BCP CT9	V	No	15.2	78	511282			21	23
BCP CT10s	BCP CT10	V	No	15.2	78	511282			21	23
APCI CT1s	APCI CT1	V	No	6.1	78	91853			16	11
APCI CT2s	APCI CT2	V	No	6.1	78	91853			16	11
APCI CT3s	APCI CT3	V	No	6.1	78	91853			16	11
RRNP- VOC138-1- 120	Fab 11	V	No	40	525	1479			14	1.5
RRNP- VOC138-2- 120	Fab 11	V	No	40	525	1479			14	1.5
RRNP- VOC138-3- 120	Fab 11	V	No	40	525	1479			14	1.5
F11F- VOC138-1- 120	Fab 11	V	No	40	525	1479			14	1.5

Stack Number	Serving Unit Number(s) from Table 2-A	Orientation (H=Horizontal V=Vertical)	Rain Caps (Yes or No)	Height Above Ground (m)	Temp. (F)	Flow Rate		Moisture by Volume (%)	Velocity (ft/sec)	Inside Diameter or
						(acfs)	(dscfs)			L x W (ft)
F11F- VOC138-2- 120	Fab 11	V	No	40	525	1479			14	1.5
F11B- VOC138-1- 120	Fab 11	V	No	40	525	1479			14	1.5
F11B- VOC138-2- 120s	Fab 11	V	No	40	525	1479			14	1.5
F11Xe Munters 1	Fab 11	V	No	40	525	1479			14	1.5
F11Xe Munters 2	Fab 11	V	No	40	525	1479			14	1.5
F11Xe Munters 3	Fab 11	V	No	40	525	1479			14	1.5
F11Xe Munters 5	Fab 11	V	No	40	525	1479			14	1.5
F11Xe Munters 6	Fab 11	V	No	40	525	1479			14	1.5
F11Xe Munters 11	Fab 11	V	No	40	525	1479			14	1.5
F11Xe Munters 12	Fab 11	V	No	40	525	1479			14	1.5
F11Xe Munters 13	Fab 11	V	No	40	525	1479			14	1.5
F11Xe Munters 14	Fab 11	V	No	40	525	1479			14	1.5
F11Xe Munters 15	Fab 11	V	No	40	525	1479			14	1.5
OX293-0-70	Fab 11	V	No	39.6	210	38.47			28	1.4
F11Xe ATS 2s	Fab 11	V	No	39.6	210	38.47			28	1.4
F11Xe ATS 3s	Fab 11	V	No	39.6	210	38.47			28	1.4
F11Xe BSSW 1s	Fab 11	V	No	34.4	1400	5			57	0.33
sc-12-cr1-1s	Fab 11	V	No	12.8	71	84			38	1.7
sc-12-cr1-2s	Fab 11	V	No	13.4	70	366			52	3.0
RRGC_SC- 12-GC1-1s	Fab 11	V	No	12.8	72	83			17	2.5
RRGC_SC- 12-GC1-2s	Fab 11	V	No	12.8	71	84			38	1.7
RRGC_SC- 133-3-100s	Fab 11	V	No	12.8	71	163			100	1.4
RRGC_SC- 133-4-100s	Fab 11	V	No	12.8	71	163			100	1.4

Stack Number	Serving Unit Number(s) from Table 2-A	Orientation (H=Horizontal V=Vertical)	Rain Caps (Yes or No)	Height Above Ground (m)	Temp. (F)	Flow Rate		Moisture by Volume (%)	Velocity (ft/sec)	Inside Diameter or
						(acfs)	(dscfs)			L x W (ft)
f9-sc-5-1-3s	Fab 11	V	No	16.8	71	84			38	1.7
sc-12-np2-1s	Fab 11	V	No	21.6	53	83			47	1.5
sc-12-np2-2s	Fab 11	V	No	23.2	53	833			66	4.0
sc-12-np2-3s	Fab 11	V	No	23.2	53	833			66	4.0
sc-12-np2-4s	Fab 11	V	No	23.2	53	833			66	4.0
sc-40-np2-1s	Fab 11	V	No	21.6	53	83			47	1.5
sc-40-np2-2s	Fab 11	V	No	21.6	53	83			47	1.5
sc-40-np2-3s	Fab 11	V	No	23.2	53	833			66	4.0
sc-40-It2-1s/sc-40-It2-2s	Fab 11	V	No	30.0	53	83			47	1.5
sc-12-It2-1s	Fab 11	V	No	39.6	68	665			49	4.2
sc-12-It2-2s	Fab 11	V	No	23.2	53	833			66	4.0
sc-12-It2-3s	Fab 11	V	No	23.2	53	833			66	4.0
sc-12-fb1-1s	Fab 11	V	No	30.0	70	916			48	4.9
sc-12-fb1-2s	Fab 11	V	No	30.0	70	892			47	4.9
sc-12-fb1-3s	Fab 11	V	No	30.0	70	892			47	4.9
sc-12-fb1-4s	Fab 11	V	No	30.0	70	892			47	4.9
sc-12-fb1-5s	Fab 11	V	No	30.0	70	892			47	4.9
RRFB-SC142-1-00s	Fab 11	V	No	30.0	70	892			47	4.9
RRFB-SC142-2-00s	Fab 11	V	No	30.0	70	892			47	4.9
RRFD-SC142-1-00s	Fab 11	V	No	30.0	70	892			47	4.9
sc-12-fd1-3s	Fab 11	V	No	30.0	70	892			47	4.9
sc-12-fd1-6s	Fab 11	V	No	30.0	70	892			47	4.9
F11Xe Scrubber 1s	Fab 11	V	No	39.6	68	416			50	3.2
F11Xe Scrubber 2s	Fab 11	V	No	39.6	68	416			50	3.2
F11Xe Scrubber 3s	Fab 11	V	No	39.6	68	416			50	3.2
F11Xe Scrubber 4s	Fab 11	V	No	39.6	68	833			51	4.6
F11Xe Scrubber 5s	Fab 11	V	No	39.6	68	833			51	4.6
F11Xe Scrubber 6s	Fab 11	V	No	39.6	68	833			51	4.6

Stack Number	Serving Unit Number(s) from Table 2-A	Orientation (H=Horizontal V=Vertical)	Rain Caps (Yes or No)	Height Above Ground (m)	Temp. (F)	Flow Rate		Moisture by Volume (%)	Velocity (ft/sec)	Inside Diameter or
						(acfs)	(dscfs)			L x W (ft)
F11Xe Scrubber 7s	Fab 11	V	No	39.6	68	833			51	4.6
F11Xe Scrubber 8s	Fab 11	V	No	39.6	68	833			51	4.6
F11Xe Scrubber 9s	Fab 11	V	No	39.6	68	833			51	4.6
F11Xe Scrubber 10s	Fab 11	V	No	39.6	68	833			51	4.6
F11Xe Scrubber 11s	Fab 11	V	No	39.6	68	833			51	4.6
PUB Scrubber 1s	Fab 11	V	No	34.4	68	333			50	2.9
PUB Scrubber 2s	Fab 11	V	No	34.4	68	333			50	2.9
PUB Scrubber 3s	Fab 11	V	No	34.4	68	333			50	2.9
PUB Scrubber 4s	Fab 11	V	No	34.4	68	333			50	2.9

Table 2-J: Fuel

Specify fuel characteristics and usage. Unit and stack numbering must correspond throughout the application package.						
Unit No.	Fuel Type (No. 2 Diesel, Natural Gas, Coal, ...)	Specify Units				
		Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
ecs-boi-97s	Natural Gas	1030 Btu/scf	52.5 MMBtu/hr	446.5 MM-scf	negligible	N/A
ecs-boi-97s	Diesel Fuel	144,000 Btu/gallon	52.5 MMBtu/hr	3.2 MM-gallon	less than 0.5%	N/A
ecs-boi-98s	Natural Gas	1030 Btu/scf	52.5 MMBtu/hr	446.5 MM-scf	negligible	N/A
ecs-boi-98s	Diesel Fuel	144,000 Btu/gallon	52.5 MMBtu/hr	3.2 MM-gallon	less than 0.5%	N/A
blr-32-gd3-1s	Natural Gas	1030 Btu/scf	52.5 MMBtu/hr	446.5 MM-scf	negligible	N/A
blr-32-gd3-1s	Diesel Fuel	144,000 Btu/gallon	52.5 MMBtu/hr	3.2 MM-gallon	less than 0.5%	N/A
blr-32-gd3-2s	Natural Gas	1030 Btu/scf	52.5 MMBtu/hr	446.5 MM-scf	negligible	N/A
blr-32-gd3-2s	Diesel Fuel	144,000 Btu/gallon	52.5 MMBtu/hr	3.2 MM-gallon	less than 0.5%	N/A
blr-32-gd3-3s	Natural Gas	1030 Btu/scf	52.5 MMBtu/hr	446.5 MM-scf	negligible	N/A
blr-32-gd3-3s	Diesel Fuel	144,000 Btu/gallon	52.5 MMBtu/hr	3.2 MM-gallon	less than 0.5%	N/A
blr-32-gd3-4s	Natural Gas	1030 Btu/scf	52.5 MMBtu/hr	446.5 MM-scf	negligible	N/A
blr-32-gd3-4s	Diesel Fuel	144,000 Btu/gallon	52.5 MMBtu/hr	3.2 MM-gallon	less than 0.5%	N/A
blr-32-gd3-5s	Natural Gas	1030 Btu/scf	52.5 MMBtu/hr	446.5 MM-scf	negligible	N/A
blr-32-gd3-5s	Diesel Fuel	144,000 Btu/gallon	52.5 MMBtu/hr	3.2 MM-gallon	less than 0.5%	N/A
blr-32-gd3-6s	Natural Gas	1030 Btu/scf	52.5 MMBtu/hr	446.5 MM-scf	negligible	N/A
blr-32-gd3-6s	Diesel Fuel	144,000 Btu/gallon	52.5 MMBtu/hr	3.2 MM-gallon	less than 0.5%	N/A
BCP Boiler 7	Natural Gas	1030 Btu/scf	8.37 MMBtu/hr	71.2 MM-scf	negligible	N/A
BCP Boiler 7	Diesel Fuel	144,000 Btu/gallon	8.37 MMBtu/hr	0.003 MM-gallon	less than 0.5%	N/A
BCP Boiler 8	Natural Gas	1030 Btu/scf	29.3 MMBtu/hr	249.2 MM-scf	negligible	N/A

Unit No.	Fuel Type (No. 2 Diesel, Natural Gas, Coal, ...)	Specify Units				
		Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
BCP Boiler 8	Diesel Fuel	144,000 Btu/gallon	29.3 MMBtu/hr	0.01 MM-gallon	less than 0.5%	N/A
BCP Boiler 9	Natural Gas	1030 Btu/scf	29.3 MMBtu/hr	249.2 MM-scf	negligible	N/A
BCP Boiler 9	Diesel Fuel	144,000 Btu/gallon	29.3 MMBtu/hr	0.01 MM-gallon	less than 0.5%	N/A
BCP Boiler 10	Natural Gas	1030 Btu/scf	29.3 MMBtu/hr	249.2 MM-scf	negligible	N/A
BCP Boiler 10	Diesel Fuel	144,000 Btu/gallon	29.3 MMBtu/hr	0.01 MM-gallon	less than 0.5%	N/A
BCP Boiler 11	Natural Gas	1030 Btu/scf	29.3 MMBtu/hr	249.2 MM-scf	negligible	N/A
BCP Boiler 11	Diesel Fuel	144,000 Btu/gallon	29.3 MMBtu/hr	0.01 MM-gallon	less than 0.5%	N/A
RRNP-VOC138-1-120	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
RRNP-VOC138-2-120	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
RRNP-VOC138-3-120	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
F11F-VOC138-1-120	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
F11F-VOC138-2-120	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
F11B-VOC138-1-120	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
F11B-VOC138-2-120s	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
F11Xe Munters 1	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
F11Xe Munters 2	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
F11Xe Munters 3	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
F11Xe Munters 5	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
F11Xe Munters 6	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
F11Xe Munters 11	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
F11Xe Munters 12	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
F11Xe Munters 13	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
F11Xe Munters 14	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
F11Xe Munters 15	Natural Gas	1030 Btu/scf	2.61 MMBtu/hr	22.2 MM-scf	negligible	N/A
OX293-0-70	Natural Gas	1030 Btu/scf	3.0 MMBtu/hr	25.5 MM-scf	negligible	N/A
F11Xe ATS 2	Natural Gas	1030 Btu/scf	3.0 MMBtu/hr	25.5 MM-scf	negligible	N/A

Unit No.	Fuel Type (No. 2 Diesel, Natural Gas, Coal, ...)	Specify Units				
		Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
F11Xe ATS 3	Natural Gas	1030 Btu/scf	3.0 MMBtu/hr	25.5 MM-scf	negligible	N/A
F11Xe BSSW 1	Natural Gas	1030 Btu/scf	0.5 MMBtu/hr	4.3 MM-scf	negligible	N/A



Table 2-K: Liquid Data for Tanks Listed in Table 2-L

For each tank, list the liquid(s) to be stored in each tank. If it is expected that a tank may store a variety of hydrocarbon liquids, enter "mixed hydrocarbons" in the Composition column for that tank and enter the corresponding data of the most volatile liquid to be stored in the tank. If tank is to be used for storage of different materials, list all the materials in the "All Calculations" attachment, run the newest version of TANKS on each, and use the material with the highest emission rate to determine maximum uncontrolled and requested allowable emissions rate. The permit will specify the most volatile category of liquids that may be stored in each tank. Include appropriate tank-flashing modeling input data. Use additional sheets if necessary. Unit and stack numbering must correspond throughout the application package.

Tank No.	SCC Code	Material Name	Composition	Liquid Density (lb/gal)	Vapor Molecular Weight (lb/lb*mol)	Average Storage Conditions		Max Storage Conditions	
						Temperature (°F)	True Vapor Pressure (psia)	Temperature (°F)	True Vapor Pressure (psia)
TK_80_GH1_1	31306599	30% HCl	Hydrochloric Acid	-	36.5	59	4.4	66	4.41
TK_80_GH1_2	31306599	30% HCl	Hydrochloric Acid	-	36.5	59	4.4	66	4.41
TK_71_GA3_1	31306599	AWN tank	Wastewater	-	36.5	59	3.5E-04	66	3.5E-04
TK_71_GA4_1	31306599	AWN tank	Wastewater	-	36.5	59	3.5E-04	66	3.5E-04
TK_71_GA5_1	31306599	AWN tank	Wastewater	-	36.5	59	3.5E-04	66	3.5E-04
TK_71_GA6_1	31306599	AWN tank	Wastewater	-	36.5	59	3.5E-04	66	3.5E-04
TK_71_GA7_1	31306599	AWN lift tank N	Wastewater	-	36.5	59	3.5E-04	66	3.5E-04
TK_71_GA7_2	31306599	AWN lift tank S	Wastewater	-	36.5	59	3.5E-04	66	3.5E-04
RRGC_TK2_66_1_60	31306599	HF Reaction Tk (HFW-S)	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02
RRGC_TK2_66_2_60	31306599	HF Reaction Tk (HFW-S)	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02
RRGN_TK2_66_1_60	31306599	HF Reaction Tk (HFW-N)	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02
RRGN_TK2_66_2_60	31306599	HF Reaction Tk (HFW-N)	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02
TK-72-GA2-6	31306599	HF Collection Tk (Back up system)	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02
TK-72-GA2-7	31306599	HF Collection Tk (Back up system)	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02
RRGA_TK2_66_1_15	31306599	HF Collection Tk (HFW-S)	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02
RRGA_TK2_66_2_15	31306599	HF Collection Tk (HFW-S)	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02
RRGA_TK2_66_3_15	31306599	HF Collection Tk (HFW-S)	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02
RRGN_TK2_66_1_15	31306599	HF Collection Tk (HFW-N)	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02

Tank No.	SCC Code	Material Name	Composition	Liquid Density (lb/gal)	Vapor Molecular Weight (lb/lb*mol)	Average Storage Conditions		Max Storage Conditions	
						Temperature (°F)	True Vapor Pressure (psia)	Temperature (°F)	True Vapor Pressure (psia)
RRGN_TK2 66_2_15	31306599	HF Collection Tk (HFW-N)	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02
TK266_0_3 5A (TK72_GA2 5)	31306599	HF Drain Tank (Primary System)	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02
RRNA_TK2 66_4_00	31306599	Fab 11X HF Lift Tank	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02
RRNA_TK2 66_1_00	31306599	Fab 11X HF Lift Tank	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02
RRNA_TK2 66_2_00	31306599	Fab 11X HF Lift Tank	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02
RRNA_TK2 66_3_00	31306599	Fab 11X HF Lift Tank	Hydrofluoric Acid	-	20.0	59	5.3E-02	66	5.3E-02
TK_76_GH1 _2_1	31306599	Divert Solvent Tank	General Solvent	-	107.1	59	2.2E-01	66	0.22
TK_76_GH1 _1_1	31306599	General Solvent	General Solvent	-	107.1	59	2.2E-01	66	0.22
TK_79_GH4 _1	31306599	Corrosive Solvent (1)	Corrosive Solvent	-	64.2	59	2.7E-01	66	0.27
TK_79_GH4 _2	31306599	Corrosive Solvent (2)	Corrosive Solvent	-	64.2	59	2.7E-01	66	0.27
TK_79_GH4 _3	31306599	Corrosive Solvent (3)	Ethylene Glycol	-	27.7	59	2.7E-01	66	0.27
TK_286_GH 1_1	31306599	SOG (SLAM)	SOG (SLAM)	-	115.1	59	6.4E-02	66	6.4E-02
TK_71_GA3 _1	31306599	AWN tank (1-heptanethiol)	1-heptanethiol	-	132.3	59	2.2E-08	66	2.2E-08
TK_71_GA4 _1	31306599	AWN tank (1-heptanethiol)	1-heptanethiol	-	132.3	59	2.2E-08	66	2.2E-08
TK_71_GA5 _1	31306599	AWN tank (1-heptanethiol)	1-heptanethiol	-	132.3	59	2.2E-08	66	2.2E-08
TK_71_GA6 _1	31306599	AWN tank (1-heptanethiol)	1-heptanethiol	-	132.3	59	2.2E-08	66	2.2E-08
TK_71_GA7 _1	31306599	AWN lift tank N (1-heptanethiol)	1-heptanethiol	-	132.3	59	2.2E-08	66	2.2E-08
TK_71_GA7 _2	31306599	AWN lift tank S (1-heptanethiol)	1-heptanethiol	-	132.3	59	2.2E-08	66	2.2E-08
TK_71_GA3 _1	31306599	AWN tank (Chlorine Dioxide)	Chlorine Dioxide	-	67.5	59	5.3E-04	66	5.3E-04
TK_71_GA4 _1	31306599	AWN tank (Chlorine Dioxide)	Chlorine Dioxide	-	67.5	59	5.3E-04	66	5.3E-04
TK_71_GA5 _1	31306599	AWN tank (Chlorine Dioxide)	Chlorine Dioxide	-	67.5	59	5.3E-04	66	5.3E-04

Tank No.	SCC Code	Material Name	Composition	Liquid Density (lb/gal)	Vapor Molecular Weight (lb/lb*mol)	Average Storage Conditions		Max Storage Conditions	
						Temperature (°F)	True Vapor Pressure (psia)	Temperature (°F)	True Vapor Pressure (psia)
TK_71_GA6_1	31306599	AWN tank (Chlorine Dioxide)	Chlorine Dioxide	-	67.5	59	5.3E-04	66	5.3E-04
TK_71_GA7_1	31306599	AWN lift tank N (Chlorine Dioxide)	Chlorine Dioxide	-	67.5	59	5.3E-04	66	5.3E-04
TK_71_GA7_2	31306599	AWN lift tank S (Chlorine Dioxide)	Chlorine Dioxide	-	67.5	59	5.3E-04	66	5.3E-04
TK_71_GH1_1	31306599	93% Sulfuric Acid	Sulfuric Acid	-	98.0	59	6.0E-03	66	6.0E-03

Table 2-L: Tank Data

Include appropriate tank-flashing modeling input data. Use an addendum to this table for unlisted data categories. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary. See reference Table 2-L2. Note: 1.00 bbl = 10.159 M3 = 42.0 gal

Tank No.	Date Installed	Materials Stored	Seal Type (refer to Table 2-LR below)	Roof Type (refer to Table 2-LR below)	Capacity		Diameter (M)	Vapor Space (M)	Color (from Table VI-C)		Paint Condition (from Table VI-C)	Annual Throughput (gal/yr)	Turn-overs (per year)
					(bbl)	(M ³)			Roof	Shell			
TK_80_GH 1_1	1994	36% Hydrochloric Acid	-	Vertical Tank - Dome	167	26	3.05	2.04	White	White	Good	22,702	3.2
TK_80_GH 1_2	1994	36% Hydrochloric Acid	-	Vertical Tank - Dome	167	26	3.05	2.04	White	White	Good	22,702	3.2
TK_71_GA 3_1	1994	Wastewater (AWN)	-	Vertical Tank - Dome	595	95	4.6	0.31	White	White	Good	1,174,595,802	49364
TK_71_GA 4_1	1994	Wastewater (AWN)	-	Vertical Tank - Dome	595	95	4.6	0.31	White	White	Good	1,174,595,802	49364
TK_71_GA 5_1	1994	Wastewater (AWN)	-	Vertical Tank - Dome	595	95	4.6	0.31	White	White	Good	1,174,595,802	49364
TK_71_GA 6_1	1994	Wastewater (AWN)	-	Vertical Tank - Dome	595	95	4.6	0.31	White	White	Good	1,174,595,802	49364
TK_71_GA 7_1	1994	Wastewater (North Lift Tank)	-	Vertical Tank - Dome	310	49	3.7	0.25	White	White	Good	625,656,064	47466
TK_71_GA 7_2	1994	Wastewater (South Lift Tank)	-	Vertical Tank - Dome	310	49	3.7	0.25	White	White	Good	625,656,064	47466
RRGC_TK 266_1_60	Apr-08	Hydrofluoric Acid (South RXN Tank)	-	Vertical Tank - Dome	115	18	2.4	0.17	White	White	Good	23,342,074	4657
RRGC_TK 266_2_60	Apr-08	Hydrofluoric Acid (South RXN Tank)	-	Vertical Tank - Dome	115	18	2.4	0.17	White	White	Good	23,342,074	4657
RRGN_TK 266_1_60	2009	Hydrofluoric Acid (North RXN Tank)	-	Vertical Tank - Dome	115	18	2.4	0.17	White	White	Good	17,783,483	3548
RRGN_TK 266_2_60	2009	Hydrofluoric Acid (North RXN Tank)	-	Vertical Tank - Dome	115	18	2.4	0.17	White	White	Good	17,783,483	3548
TK-72-GA2 6	Apr-01	Hydrofluoric Acid (Backup System)	-	Vertical Tank - Dome	507	81	4.3	3.1	White	White	Good	13,549,023	636.2
TK-72-GA2 7	May-01	Hydrofluoric Acid (Backup System)	-	Vertical Tank - Dome	507	81	4.3	3.1	White	White	Good	13,549,023	636.2

Tank No.	Date Installed	Materials Stored	Seal Type (refer to Table 2-LR below)	Roof Type (refer to Table 2-LR below)	Capacity		Diameter (M)	Vapor Space (M)	Color (from Table VI-C)		Paint Condition (from Table VI-C)	Annual Throughput (gal/yr)	Turn-overs (per year)
					(bbl)	(M ³)			Roof	Shell			
RRGA_TK 266_1_15	Mar-08	Hydrofluoric Acid (South Collection)	-	Vertical Tank - Dome	545	87	4.3	3.4	White	White	Good	8,946,893	378.9
RRGA_TK 266_2_15	Mar-08	Hydrofluoric Acid (South Collection)	-	Vertical Tank - Dome	545	87	4.3	3.4	White	White	Good	8,946,893	378.9
RRGA_TK 266_3_15	Mar-08	Hydrofluoric Acid (South Collection)	-	Vertical Tank - Dome	545	87	4.3	3.4	White	White	Good	8,946,893	378.9
RRGN_TK 266_1_15	2009	Hydrofluoric Acid (North Collection)	-	Vertical Tank - Dome	952	151	4.3	6.1	White	White	Good	7,176,399	164.1
RRGN_TK 266_2_15	2009	Hydrofluoric Acid (North Collection)	-	Vertical Tank - Dome	952	151	4.3	6.1	White	White	Good	7,176,399	164.1
TK266_0_3 5A (TK72_GA 2_5)	Aug-94	Hydrofluoric Acid (HFW Drain Tank)	-	Vertical Cone Bottom Tank - Dome	62	10	2.3	2.3	White	White	Good	57,029	12
RRNA_TK 266_4_00	Feb-08	Hydrofluoric Acid (F11X Lift Station)	-	Vertical Tank - Dome	23	4	1.8	0.13	White	White	Good	6,399,791	5043.0
RRNA_TK 266_1_00	Feb-04	Hydrofluoric Acid (F11X Lift Station)	-	Vertical Tank - Dome	23	4	1.8	0.13	White	White	Good	6399791.08	5043.0
RRNA_TK 266_2_00	Feb-04	Hydrofluoric Acid (F11X Lift Station)	-	Vertical Tank - Dome	23	4	1.8	0.13	White	White	Good	6,399,791	5043.0
RRNA_TK 266_3_00	Feb-08	Hydrofluoric Acid (F11X Lift Station)	-	Vertical Tank - Dome	23	4	1.8	0.13	White	White	Good	6,399,791	5043.0
TK_76_GH 1_2_1	1994	Divert Solvent Tank	-	Horizontal Tank	119	19	2.4	1.2	White	White	Good	60,000	24
TK_76_GH 1_1_1	1994	General Solvent	-	Horizontal Tank	119	19	2.4	1.2	White	White	Good	60,000	24
TK_79_GH 4_1	1994	Corrosive Solvent (1)	-	Horizontal Tank	119	19	2.4	1.2	White	White	Good	230,000	92
TK_79_GH 4_2	1994	Corrosive Solvent (2)	-	Horizontal Tank	119	19	2.4	1.2	White	White	Good	230,000	92
TK_79_GH 4_3	1994	Corrosive Solvent (3)	-	Horizontal Tank	119	19	2.4	1.2	White	White	Good	0	0.0
TK_286_G H1_1	1994	SOG (SLAM)	-	Horizontal Tank	119	19	2.4	1.2	White	White	Good	12,500	5
TK_71_GA 3_1	1994	1-heptanethiol	-	Vertical Tank - Dome	595	95	4.6	0.31	White	White	Good	1,174,595,802	49364

Tank No.	Date Installed	Materials Stored	Seal Type (refer to Table 2- LR below)	Roof Type (refer to Table 2- LR below)	Capacity		Diameter (M)	Vapor Space (M)	Color (from Table VI-C)		Paint Condition (from Table VI-C)	Annual Throughput (gal/yr)	Turn- overs (per year)
					(bb1)	(M ³)			Roof	Shell			
TK_71_GA 4_1	1994	1-heptanethiol	-	Vertical Tank - Dome	595	95	4.6	0.31	White	White	Good	1,174,595,802	49364
TK_71_GA 5_1	1994	1-heptanethiol	-	Vertical Tank - Dome	595	95	4.6	0.31	White	White	Good	1,174,595,802	49364
TK_71_GA 6_1	1994	1-heptanethiol	-	Vertical Tank - Dome	595	95	4.6	0.31	White	White	Good	1,174,595,802	49364
TK_71_GA 7_1	1994	1-heptanethiol	-	Vertical Tank - Dome	310	49	3.7	0.25	White	White	Good	625,656,064	47466
TK_71_GA 7_2	1994	1-heptanethiol	-	Vertical Tank - Dome	310	49	3.7	0.25	White	White	Good	625656064	47466
TK_71_GA 3_1	1994	Chlorine Dioxide	-	Vertical Tank - Dome	595	95	4.6	0.31	White	White	Good	1174595802	49364
TK_71_GA 4_1	1994	Chlorine Dioxide	-	Vertical Tank - Dome	595	95	4.6	0.31	White	White	Good	1174595802	49364
TK_71_GA 5_1	1994	Chlorine Dioxide	-	Vertical Tank - Dome	595	95	4.6	0.31	White	White	Good	1174595802	49364
TK_71_GA 6_1	1994	Chlorine Dioxide	-	Vertical Tank - Dome	595	95	4.6	0.31	White	White	Good	1174595802	49364
TK_71_GA 7_1	1994	Chlorine Dioxide	-	Vertical Tank - Dome	310	49	3.7	0.25	White	White	Good	625656064	47466
TK_71_GA 7_2	1994	Chlorine Dioxide	-	Vertical Tank - Dome	310	49	3.7	0.25	White	White	Good	625656064	47466
TK_71_GH 1_1	Jul-00	93% Sulfuric Acid	-	Vertical Tank - Dome	310	38	3.7	2.4	White	White	Good	334,552	27.7

Material Processed				Material Produced			
Description	Chemical Composition	Phase (Gas, Liquid, or Solid)	Quantity (specify units)	Description	Chemical Composition	Phase	Quantity (specify units)

Table 2-P: Green House Gas Emissions

Applications submitted under 20.2.70, 20.2.72, & 20.2.74 NMAC that are Major for GHGs as determined in Section 22 of this application are required to complete this Table if so directed in Section 22 or are major for GHGs and have an existing GHG BACT. Applicants must report potential emission rates in short tons per year. Include GHG emissions during Startup, Shutdown, and Scheduled Maintenance in this table.

		CO ₂ ton/yr	N ₂ O ton/yr	CF ₄ ton/yr	SF ₆ ton/yr	CHF ₃ ton/yr	C ₄ F ₈ ton/yr	C ₂ F ₆ ton/yr	CH ₂ F ₂ ton/yr	C ₂ F ₄ ton/yr					Total GHG Mass Basis ton/yr ⁴	Total CO ₂ e ton/yr ⁵
Unit No.	GWPs¹	1	310	6500	23900	11700	8700	9200	650	0.021						
Natural Gas Sources	mass GHG	194228	-	-	-	-	-	-	-	-						194228
	CO ₂ e	194228	-	-	-	-	-	-	-	-						194228
Semiconductor Manufacturing	mass GHG	194.1	332.6	7.2	3.6	2.2	0.59	0.72	0.03	0.36						541
	CO ₂ e	194.1	103105.3	46666.1	85207.5	25258.2	5130.5	6597.2	20.7	0.01						272180
Diesel	mass GHG	3440														3440
	CO ₂ e	3440														3440
	mass GHG															
	CO ₂ e															
	mass GHG															
	CO ₂ e															
	mass GHG															
	CO ₂ e															
	mass GHG															
	CO ₂ e															
	mass GHG															
	CO ₂ e															
	mass GHG															
	CO ₂ e															
	mass GHG															
	CO ₂ e															
	mass GHG															
	CO ₂ e															

¹ GWP (Global Warming Potential): Applicants must use the most current GWPs codified in Table A-1 of 40 CFR part 98. GWPs are subject to change, therefore, applicants need to check 40 CFR 98 to confirm GWP values.

² For HFCs or PFCs describe the specific HFC or PFC compound and use a separate column for each individual compound.

³ For each new compound, enter the appropriate GWP for each HFC or PFC compound from Table A-1 in 40 CFR 98.

⁴ Green house gas emissions on a mass basis is the ton per year green house gas emission before adjustment with its GWP.

⁵ CO₂e means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.

See Section 20

Section 3

Application Summary

The **Application Summary** shall include a brief description of the facility and its process, the type of permit application, the applicable regulation (i.e. 20.2.72.200.A.X, or 20.2.73 NMAC) under which the application is being submitted, and any air quality permit numbers associated with this site. If this facility is to be collocated with another facility, provide details of the other facility including permit number(s). In case of a revision or modification to a facility, provide the lowest level regulatory citation (i.e. 20.2.72.219.B.1.d NMAC) under which the revision or modification is being requested. Also describe the proposed changes from the original permit, how the proposed modification will effect the facility's operations and emissions, de-bottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

Routine or predictable emissions during Startup, Shutdown, and Maintenance (SSM): Provide an overview of how SSM emissions are accounted for in this application. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.nmenv.state.nm.us/aqb/permit/app_form.html) for more detailed instructions on SSM emissions.

Description of the Facility:

Intel's Rio Rancho Site, New Mexico facility uses silicon wafers to manufacture semi-conductor chips for use in the computer industry. The facility consists of buildings in which chips are manufactured (Fabrication Facilities, or Fabs) and buildings containing the support equipment for the Fab including waste tanks, natural gas fired boilers and cooling towers. While manufacturing operations run 24 hours a day, 7 days a week, 365 days a year, the overall factory loading varies based on customer demand.

The manufacturing occurs in a clean environment and process steps involve cleaning with acids or solvents as well as the use of numerous other process chemicals. Semiconductors are fabricated in batches of silicon wafers and can take anywhere from one to two months to manufacture. The basic fabrication processes are oxidation, photolithography, etching, doping, and layering. During the fabrication process, wafers are cycled through several steps with some steps repeated for various purposes at different points in the process. A more detailed description of the processes and associated pollution controls are found in Section 10.

The type of permit application:

Intel is submitting this Title V Permit Application to comply with the Tailoring Rule requirement to obtain a Title V permit for facilities which emit or have the potential to emit Green House Gases (GHGs) in quantities greater than the threshold values of 100,000 tons CO₂e per year and 100 tons per year on a mass basis.

The applicable regulation under which the application is being submitted:

This application is being submitted under regulation 2.2.70.200A NMAC.

Air quality permit numbers associated with this site:

Intel is currently operating under a Synthetic Minor Permit (No. 325-M11R2), which contains Synthetic Minor emission limits for criteria air pollutants and Hazardous Air Pollutants (HAPs).

Describe the proposed changes:

There are no changes from the existing permit.

Provide an overview of how SSM emissions are accounted for:

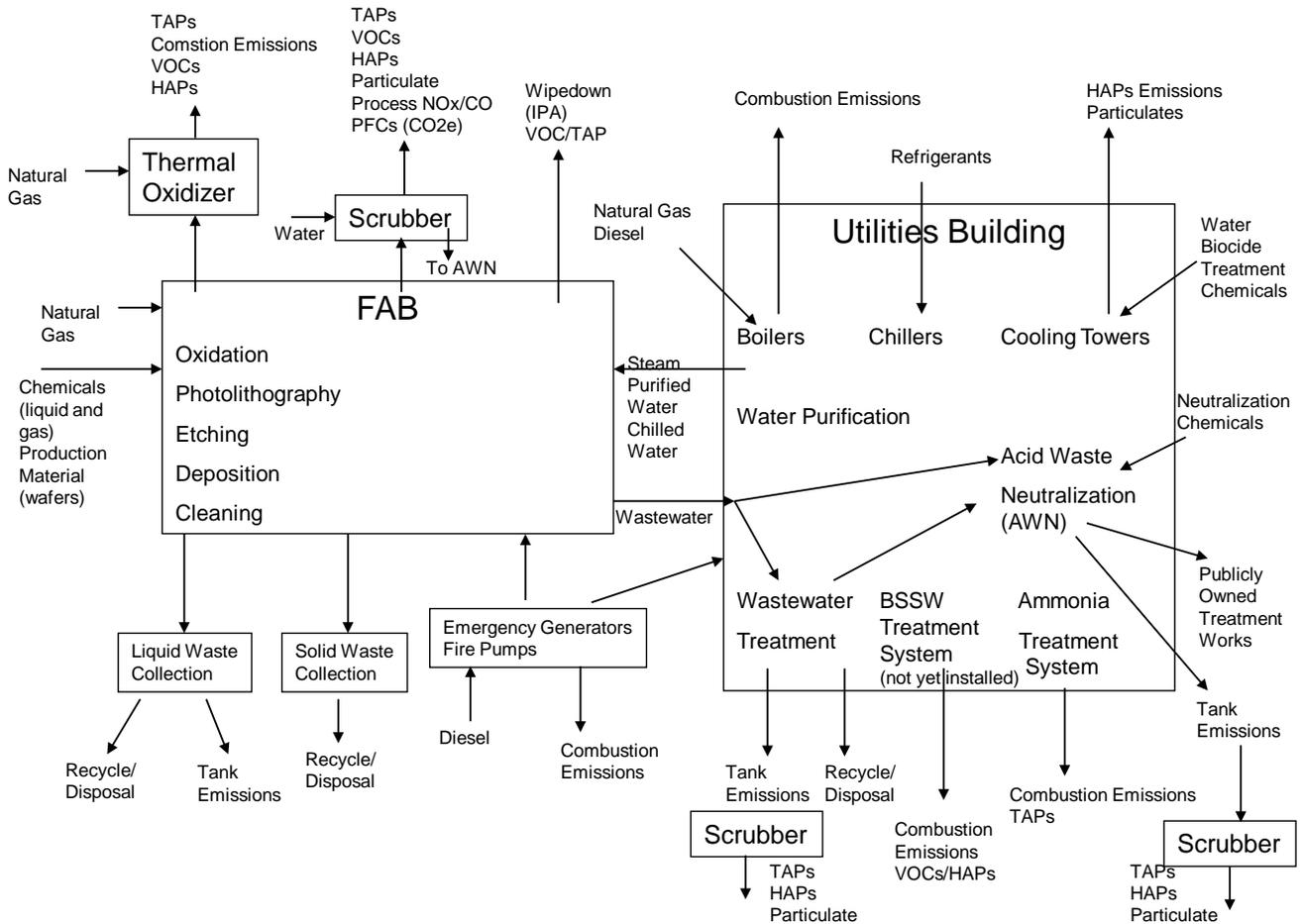
Emissions during startup, shutdown, or scheduled maintenance (SSM) of the various equipment included in this permit revision do not require an increase in the Requested Allowable Emission. Combustion and process emissions during SSM are below applicable plant specific emission limits. A detailed explanation is provided in Section 20.

Section 4

Process Flow Sheet

A **process flow sheet** and/or block diagram indicating the individual equipment, all emission points and types of control applied to those points. The unit numbering system should be consistent throughout this application.

Intel NM Process Flow Diagram



Section 5

Plot Plan Drawn To Scale

A **plot plan drawn to scale** showing emissions points, roads, structures, tanks, and fences of property owned, leased, or under direct control of the applicant. This plot plan must clearly designate the restricted area as defined in UA1, Section 1-D.12. The unit numbering system should be consistent throughout this application.

TABLE 5-1: Intel Emission Source Description

Stack ID	Stack Description	Source	Source Description	Building Location
1	sc-40-np2-3s	sc-40-np2-3	FAB 11XB Scrubber	Fab 11XB
4	sc-12-lt2-3s	sc-12-lt2-3	FAB 11XF Scrubber	Fab 11XF
7	sc-12-cr1-1s	sc-12-cr1-1	C4 Scrubber	C4
14	BCP Boiler 7s	BCP Boiler 7	Boiler 7 - 1250 BHP	BCP
15	BCP Boiler 8s	BCP Boiler 8	Boiler 8 - 1250 BHP	BCP
16	blr-32-gd3-6s	blr-32-gd3-6	Boiler 6 - 1250 BHP	CUB
17	blr-32-gd3-5s	blr-32-gd3-5	Boiler 5 - 1250 BHP	CUB
18	blr-32-gd3-2s	blr-32-gd3-2	Boiler 2 - 1250 BHP	CUB
19	blr-32-gd3-1s	blr-32-gd3-1	Boiler 1 - 1250 BHP	CUB
20	blr-32-gd3-3s	blr-32-gd3-3	Boiler 3 - 1250 BHP	CUB
21	blr-32-gd3-4s	blr-32-gd3-4	Boiler 4 - 1250 BHP	CUB
22	BCP Boiler 9s	BCP Boiler 9	Boiler 9 - 1250 BHP	BCP
23	BCP Boiler 10s	BCP Boiler 10	Boiler 10 - 1250 BHP	BCP
28	ecs-boi-97s	ecs-boi-97	Boiler 9.7 - 1250 BHP	NEC
29	ecs-boi-98s	ecs-boi-98	Boiler 9.8 - 1250 BHP	NEC
37	RRGC_SC-12-GC1-1s	SC-12-GC1-1	CUB Scrubber	CUB
40	PUB Scrubber 1s	PUB Scrubber 1	PUB Scrubber	PUB
41	PUB Scrubber 2s	PUB Scrubber 2	PUB Scrubber	PUB
42	PUB Scrubber 3s	PUB Scrubber 3	PUB Scrubber	PUB
43	F11Xe Scrubber 1s	F11Xe Scrubber 1	FAB 11XE Scrubber	Fab 11XE
44	F11Xe Scrubber 2s	F11Xe Scrubber 2	FAB 11XE Scrubber	Fab 11XE
45	sc-40-lt2-1s/sc-40-lt2-2s	sc-40-lt2-1/sc-40-lt2-2	FAB 11XF Scrubber	Fab 11XF
46	sc-12-lt2-1s	sc-12-lt2-1	FAB 11XF Scrubber	Fab 11XF
47	f9-sc-5-1-3s	f9-sc-5-1-3	FAB 11W Scrubber	Fab 11W
52	sc-12-cr1-2s	sc-12-cr1-2	C4 Scrubber	C4
53	sc-12-lt2-2s	sc-12-lt2-2	FAB 11XF Scrubber	Fab 11XF
66	F11Xe Scrubber 3s	F11Xe Scrubber 3	FAB 11XE Scrubber	Fab 11XE
67	F11Xe Scrubber 4s	F11Xe Scrubber 4	FAB 11XE Scrubber	Fab 11XE
68	F11Xe Scrubber 5s	F11Xe Scrubber 5	FAB 11XE Scrubber	Fab 11XE
69	F11Xe Scrubber 6s	F11Xe Scrubber 6	FAB 11XE Scrubber	Fab 11XE
70	F11Xe Scrubber 7s	F11Xe Scrubber 7	FAB 11XE Scrubber	Fab 11XE
71	F11Xe Scrubber 8s	F11Xe Scrubber 8	FAB 11XE Scrubber	Fab 11XE
72	F11Xe Scrubber 9s	F11Xe Scrubber 9	FAB 11XE Scrubber	Fab 11XE
73	PUB Scrubber 4s	PUB Scrubber 4	PUB Scrubber	PUB
75	F11Xe Scrubber 10s	F11Xe Scrubber 10	FAB 11XE Scrubber	Fab 11XE
76	F11Xe Scrubber 11s	F11Xe Scrubber 11	FAB 11XE Scrubber	Fab 11XE
84	sc-12-fb1-1s	sc-12-fb1-1	FAB 11XF Scrubber	Fab 11XF
85	sc-12-fb1-2s	sc-12-fb1-2	FAB 11XF Scrubber	Fab 11XF
86	sc-12-fb1-3s	sc-12-fb1-3	FAB 11XF Scrubber	Fab 11XF

Stack ID	Stack Description	Source	Source Description	Building Location
87	sc-12-fb1-4s	sc-12-fb1-4	FAB 11XF Scrubber	Fab 11XF
88	sc-12-fb1-5s	sc-12-fb1-5	FAB 11XF Scrubber	Fab 11XF
89	sc-12-np2-4s	sc-12-np2-4	FAB 11XB Scrubber	Fab 11XB
90	RRFT-EF142-1-11s RRFT-EF142-2-11s RRFV-EF142-1-11s RRFV-EF142-2-11s	RRFB-SC142-2-00	FAB 11XF Scrubber	Fab 11XF
91	RRFT-EF142-1-11s RRFT-EF142-2-11s RRFV-EF142-1-11s RRFV-EF142-2-11s	RRFB-SC142-1-00	FAB 11XF Scrubber	Fab 11XF
92	RRFT-EF142-1-11s RRFT-EF142-2-11s RRFV-EF142-1-11s RRFV-EF142-2-11s	RRFD-SC142-1-00	FAB 11XF Scrubber	Fab 11XF
93	sc-12-np2-3s	sc-12-np2-3	FAB 11XB Scrubber	Fab 11XB
94	sc-12-fd1-3s	sc-12-fd1-3	FAB 11XF Scrubber	Fab 11XF
95	sc-12-np2-2s	sc-12-np2-2	FAB 11XB Scrubber	Fab 11XB
96	sc-12-np2-1s	sc-12-np2-1	FAB 11XB Scrubber	Fab 11XB
97	sc-12-fd1-6s	sc-12-fd1-6	FAB 11XF Scrubber	Fab 11XF
121	121.CUB.CT.Us	121.CUB.CT.U	CUB Cooling Tower	Cooling Towers
122	122.CUB.CT.Us	122.CUB.CT.U	CUB Cooling Tower	Cooling Towers
123	123.CUB.CT.Us	123.CUB.CT.U	CUB Cooling Tower	Cooling Towers
124	124.CUB.CT.Us	124.CUB.CT.U	CUB Cooling Tower	Cooling Towers
125	125.CUB.CT.Us	125.CUB.CT.U	CUB Cooling Tower	Cooling Towers
126	126.CUB.CT.Us	126.CUB.CT.U	CUB Cooling Tower	Cooling Towers
127	127.CUB.CT.Us	127.CUB.CT.U	CUB Cooling Tower	Cooling Towers
128	128.CUB.CT.Us	128.CUB.CT.U	CUB Cooling Tower	Cooling Towers
129	129.CUB.CT.Us	129.CUB.CT.U	CUB Cooling Tower	Cooling Towers
130	130.CUB.CT.Us	130.CUB.CT.U	CUB Cooling Tower	Cooling Towers
131	131.CUB.CT.Us	131.CUB.CT.U	CUB Cooling Tower	Cooling Towers
132	132.CUB.CT.Us	132.CUB.CT.U	CUB Cooling Tower	Cooling Towers
133	133.NEC.CT.Us	133.NEC.CT.U	NEC Cooling Tower	Cooling Towers
134	134.NEC.CT.Us	134.NEC.CT.U	NEC Cooling Tower	Cooling Towers
135	135.NEC.CT.Us	135.NEC.CT.U	NEC Cooling Tower	Cooling Towers
136	136.NEC.CT.Us	136.NEC.CT.U	NEC Cooling Tower	Cooling Towers
137	137.NEC.CT.Us	137.NEC.CT.U	NEC Cooling Tower	Cooling Towers
138	138.NEC.CT.Us	138.NEC.CT.U	NEC Cooling Tower	Cooling Towers
139	139.NEC.CT.Us	139.NEC.CT.U	NEC Cooling Tower	Cooling Towers
140	140.NEC.CT.Us	140.NEC.CT.U	NEC Cooling Tower	Cooling Towers
141	141.NEC.CT.Us	141.NEC.CT.U	NEC Cooling Tower	Cooling Towers
142	142.NEC.CT.Us	142.NEC.CT.U	NEC Cooling Tower	Cooling Towers
143	143.NEC.CT.Us	143.NEC.CT.U	NEC Cooling Tower	Cooling Towers
144	144.NEC.CT.Us	144.NEC.CT.U	NEC Cooling Tower	Cooling Towers
151	RRGC_SC-133-3-100s	SC-133-3-100	CUB Scrubber	CUB
152	RRGC_SC-12-GC1-2s	SC-12-GC1-2	CUB Scrubber	CUB
153	RRGC_SC-133-4-100s	SC-133-4-100	CUB Scrubber	CUB
159	OX293-0-70s	OX293-0-70	Ammonia Treatment	CUB
160	sc-40-np2-2s	sc-40-np2-2	FAB 11XB Scrubber	Fab 11XB
161	sc-40-np2-1s	sc-40-np2-1	FAB 11XB Scrubber	Fab 11XB
162	RRNP-EF138-1-100s/RRNP-EF138-2-	RRNP-VOC138-1-120	Munter 1	Fab 11NX

Stack ID	Stack Description	Source	Source Description	Building Location
	100s/RRNP-EF138-3-100s/RRNP-EF138-4-100s(Concentrators) RRNP-VOC138-1-120s (Oxidizer)			
163	RRNP-EF138-1-100s/RRNP-EF138-2-100s/RRNP-EF138-3-100s/RRNP-EF138-4-100s (Concentrators) RRNP-VOC138-2-120s (Oxidizer)	RRNP-VOC138-2-120	Munter 2	Fab 11NX
164	RRNP-EF138-1-100s/RRNP-EF138-2-100s/RRNP-EF138-3-100s/RRNP-EF138-4-100s (Concentrators) RRNP-VOC138-3-120s (Oxidizer)	RRNP-VOC138-3-120	Munter 3	Fab 11NX
165	F11X Munter 15s	F11X Munter 15	Munter 15	Fab 11NX
166	F11X Munter 6s	F11X Munter 6	Munter 6	Fab 11XB
167	F11B-EF138-2-100s/F11B-EF138-3-100s/F11B-EF138-4-100s (Concentrators) F11B-VOC138-2-120s (Oxidizer)	F11B-VOC138-2-120	Munter 16	Fab 11XB
168	F11B-EF138-2-100s/F11B-EF138-3-100s/F11B-EF138-4-100s (Concentrators) F11B-VOC138-1-120s (Oxidizer)	F11B-VOC138-1-120	Munter 8	Fab 11XB
169	F11X Munter 5s	F11X Munter 5	Munter 5	Fab 11XF
170	F11F-EF138-1-100s/F11F-EF138-2-100s/F11F-EF138-3-100s (Concentrators) F11F-VOC138-2-120s (Oxidizer)	F11F-VOC138-2-120	Munter 17	Fab 11XF
171	F11F-EF138-1-100s/F11F-EF138-2-100s/F11F-EF138-3-100s (Concentrators) F11F-VOC138-1-120s (Oxidizer)	F11F-VOC138-1-120	Munter 10	Fab 11XF
172	F11Xe Munter 11s	F11Xe Munter 11	Munter 11	Fab 11XE
173	F11Xe Munter 12s	F11Xe Munter 12	Munter 12	Fab 11XE
174	F11Xe Munter 13s	F11Xe Munter 13	Munter 13	Fab 11XE
175	F11Xe Munter 14s	F11Xe Munter 14	Munter 14	Fab 11XE
176	F11Xe Munter 1s	F11Xe Munter 1	Munter 1	Fab 11XE
177	F11Xe Munter 2s	F11Xe Munter 2	Munter 2	Fab 11XE
178	F11Xe Munter 3s	F11Xe Munter 3	Munter 3	Fab 11XE
179	F11Xe BSSW 1s	F11Xe BSSW 1	Bulk Waste	Fab 11XE
180	OX293-0-70s	OX293-0-70	Ammonia Treatment	Fab 11XE
181	F11Xe ATS 2s	F11Xe ATS 2	Ammonia Treatment	Fab 11XE
182	F11Xe ATS 3s	F11Xe ATS 3	Ammonia Treatment	Fab 11XE
183	BCP Boiler 11s	BCP Boiler 11	Boiler 11 - 1250 BHP	BCP
184	BCP Cooling Tower 1s	BCP Cooling Tower 1	BCP Cooling Tower	Cooling Towers

Stack ID	Stack Description	Source	Source Description	Building Location
185	BCP Cooling Tower 2s	BCP Cooling Tower 2	BCP Cooling Tower	Cooling Towers
186	BCP Cooling Tower 3s	BCP Cooling Tower 3	BCP Cooling Tower	Cooling Towers
187	BCP Cooling Tower 4s	BCP Cooling Tower 4	BCP Cooling Tower	Cooling Towers
188	BCP Cooling Tower 5s	BCP Cooling Tower 5	BCP Cooling Tower	Cooling Towers
189	BCP Cooling Tower 6s	BCP Cooling Tower 6	BCP Cooling Tower	Cooling Towers
190	BCP Cooling Tower 7s	BCP Cooling Tower 7	BCP Cooling Tower	Cooling Towers
191	BCP Cooling Tower 8s	BCP Cooling Tower 8	BCP Cooling Tower	Cooling Towers
192	BCP Cooling Tower 9s	BCP Cooling Tower 9	BCP Cooling Tower	Cooling Towers
193	BCP Cooling Tower 10s	BCP Cooling Tower 10	BCP Cooling Tower	Cooling Towers
194	APCI Cooling Tower 1	APCI Cooling Tower 1	APCI Cooling Tower	Cooling Towers
195	APCI Cooling Tower 2	APCI Cooling Tower 2	APCI Cooling Tower	Cooling Towers
196	APCI Cooling Tower 3	APCI Cooling Tower 3	APCI Cooling Tower	Cooling Towers

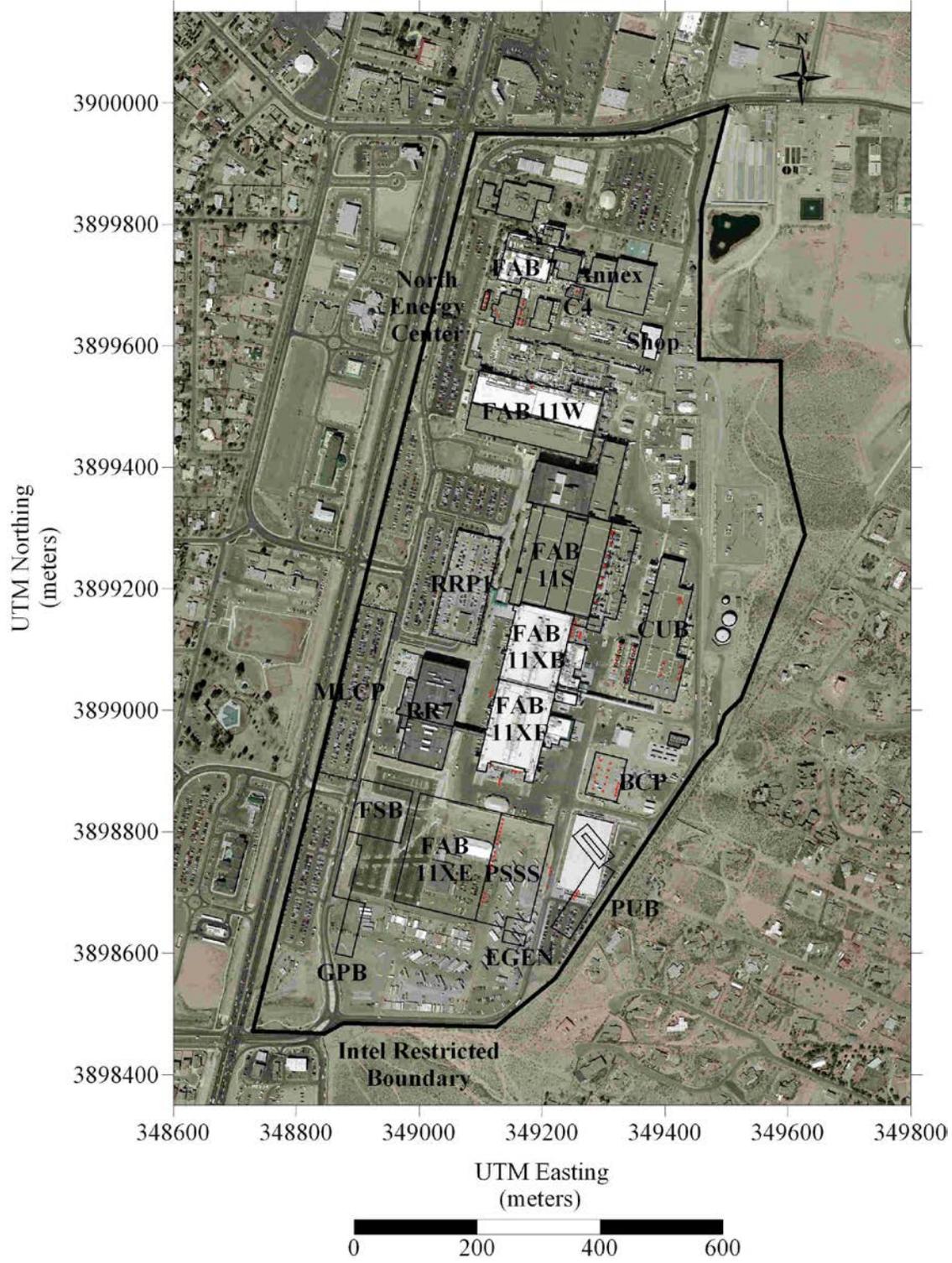


Figure 5-1: Aerial Overview of Intel's Rio Rancho Facility

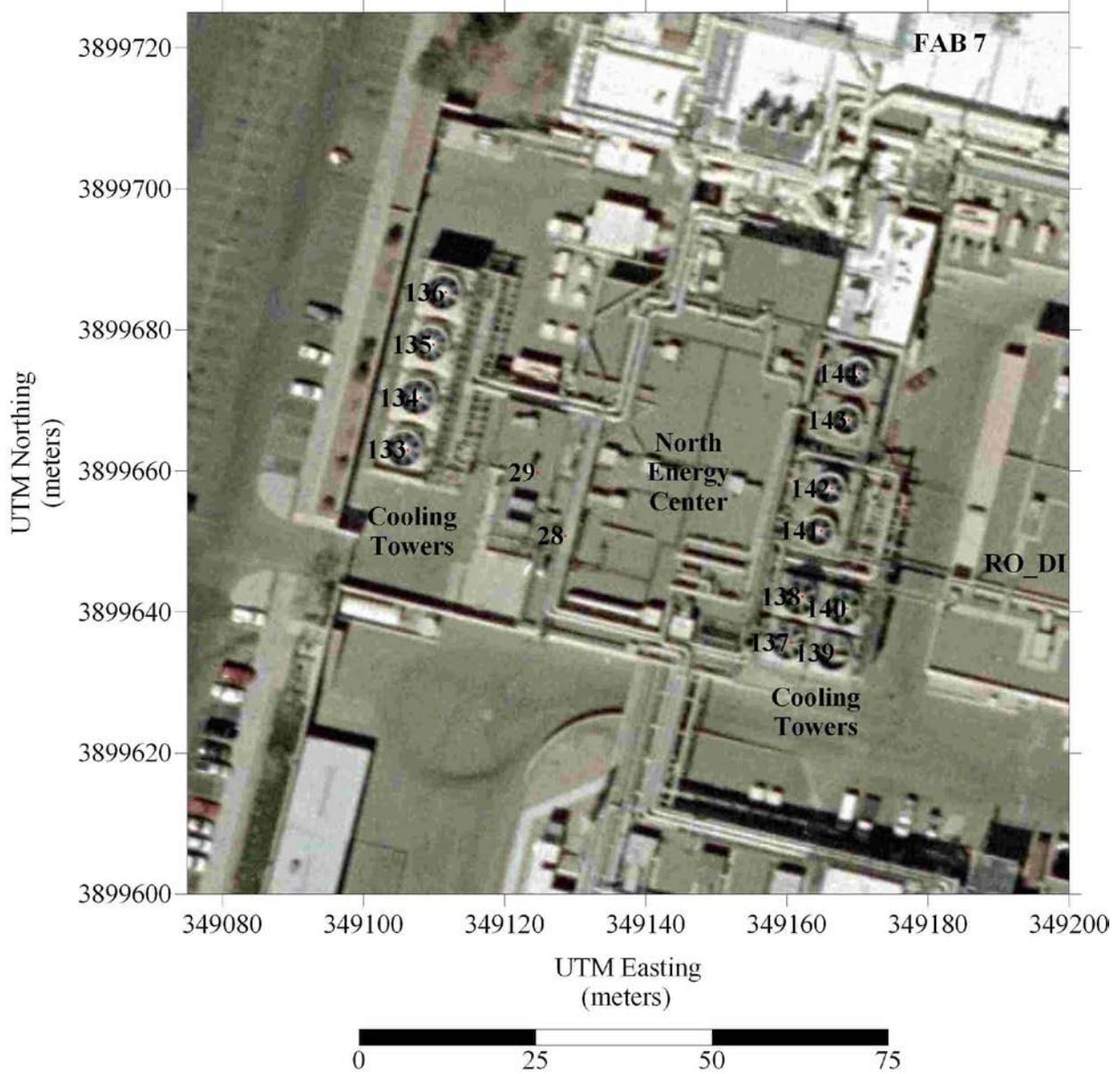


Figure 5-2: Stack Locations near North Energy Center

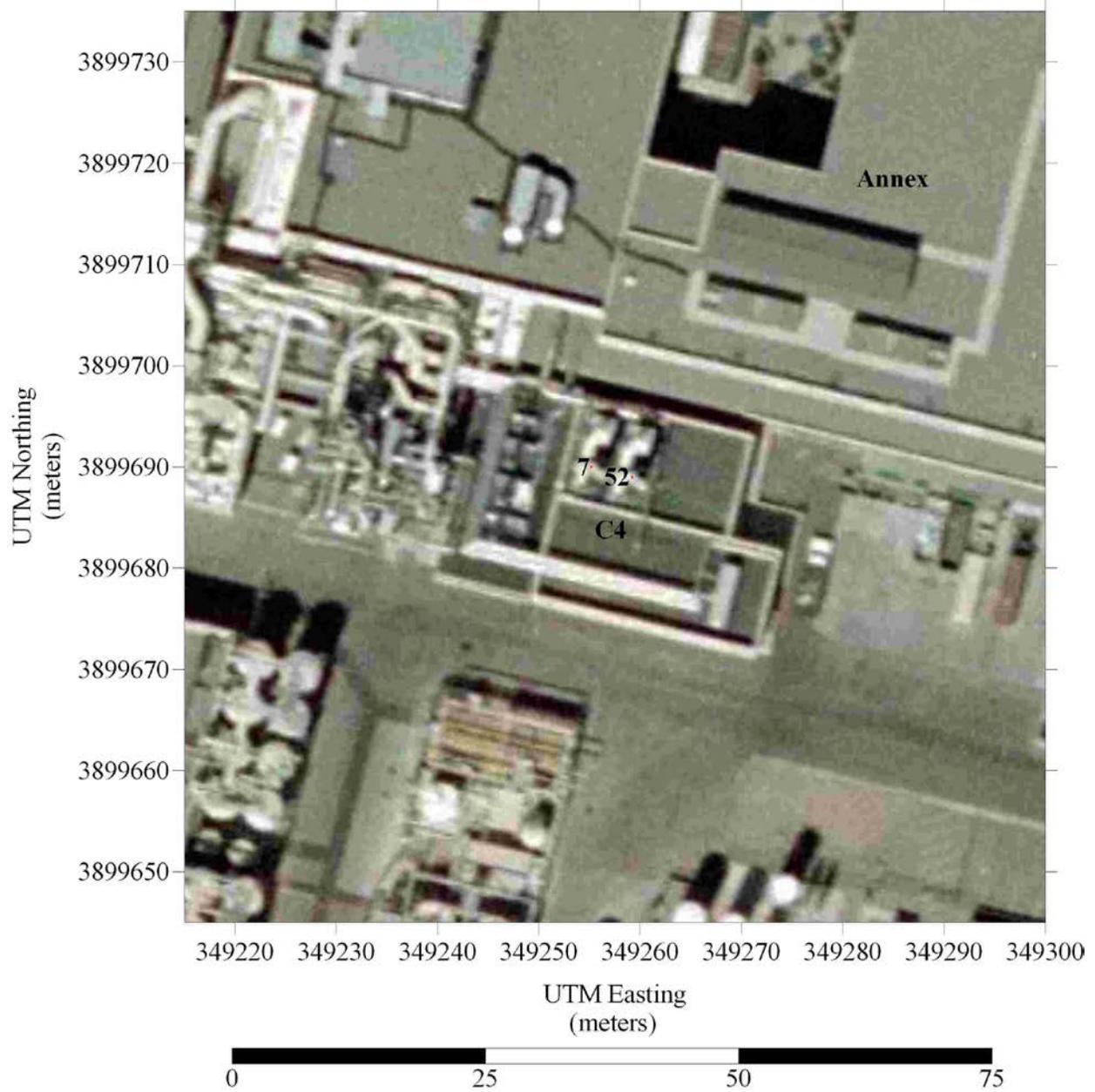


Figure 5-3: Stack Locations near Building C4

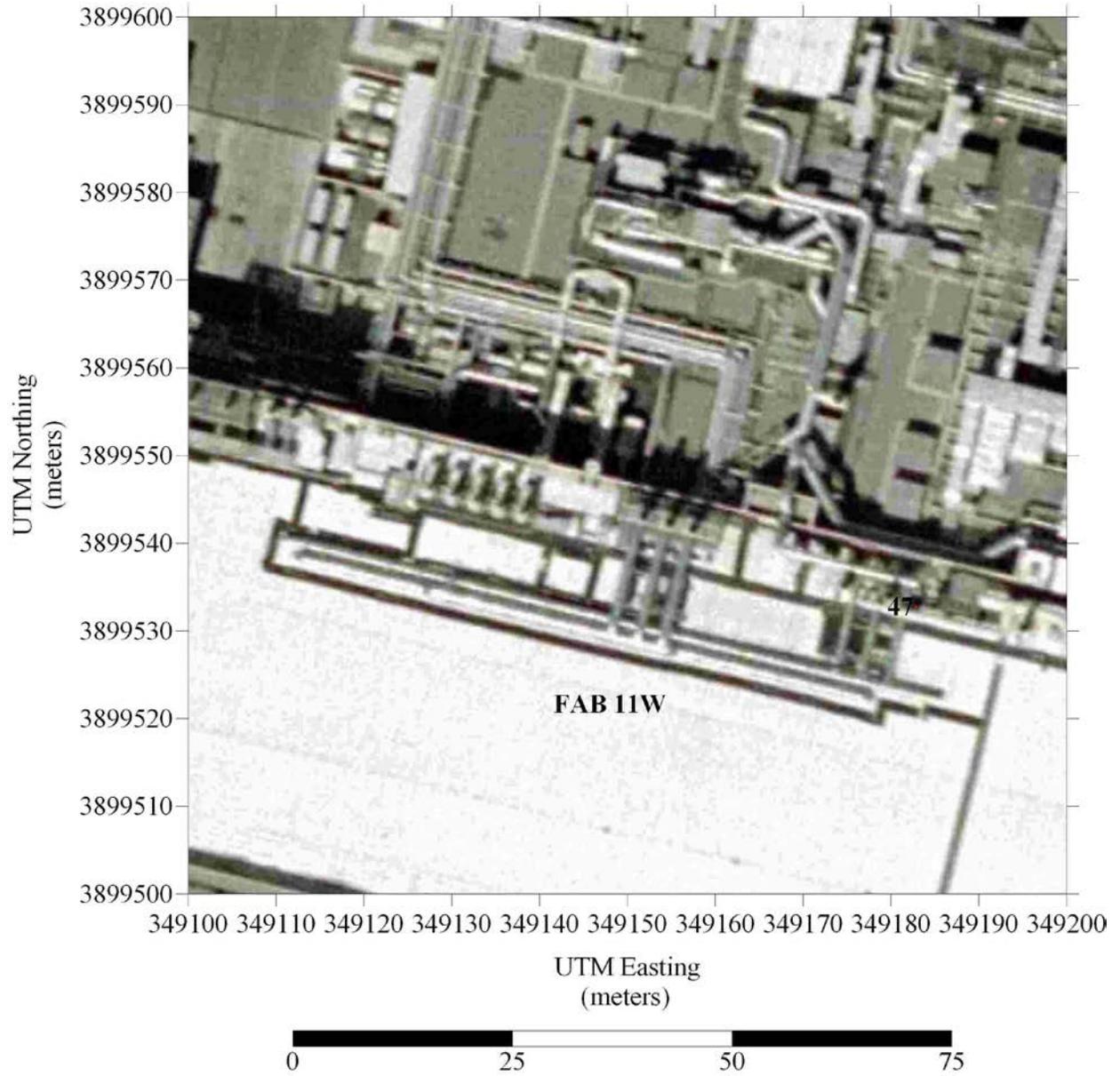


Figure 5-4: Stack Locations near West Side of FAB 11W

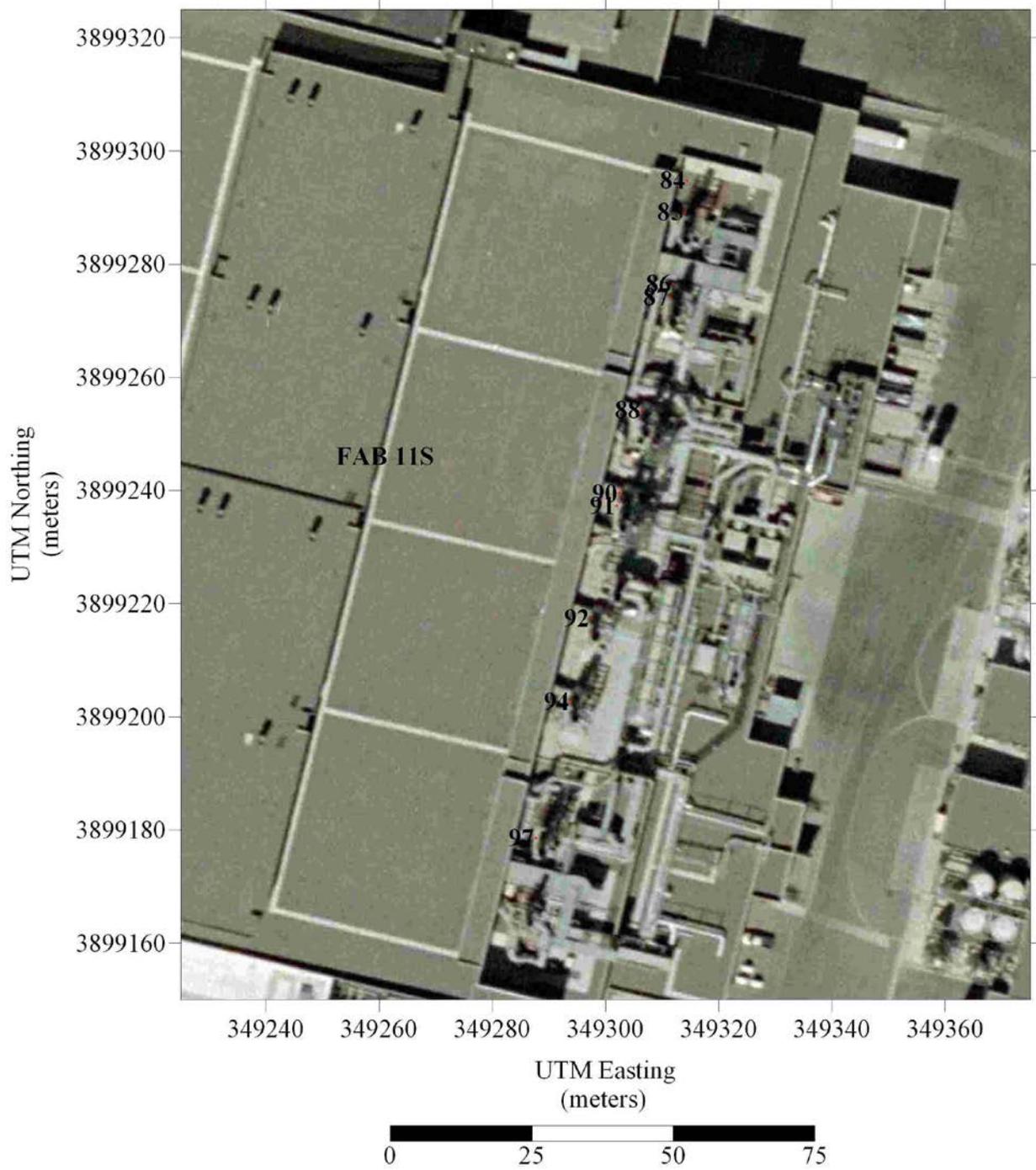


Figure 5-5: Stack Locations near FAB 11NX

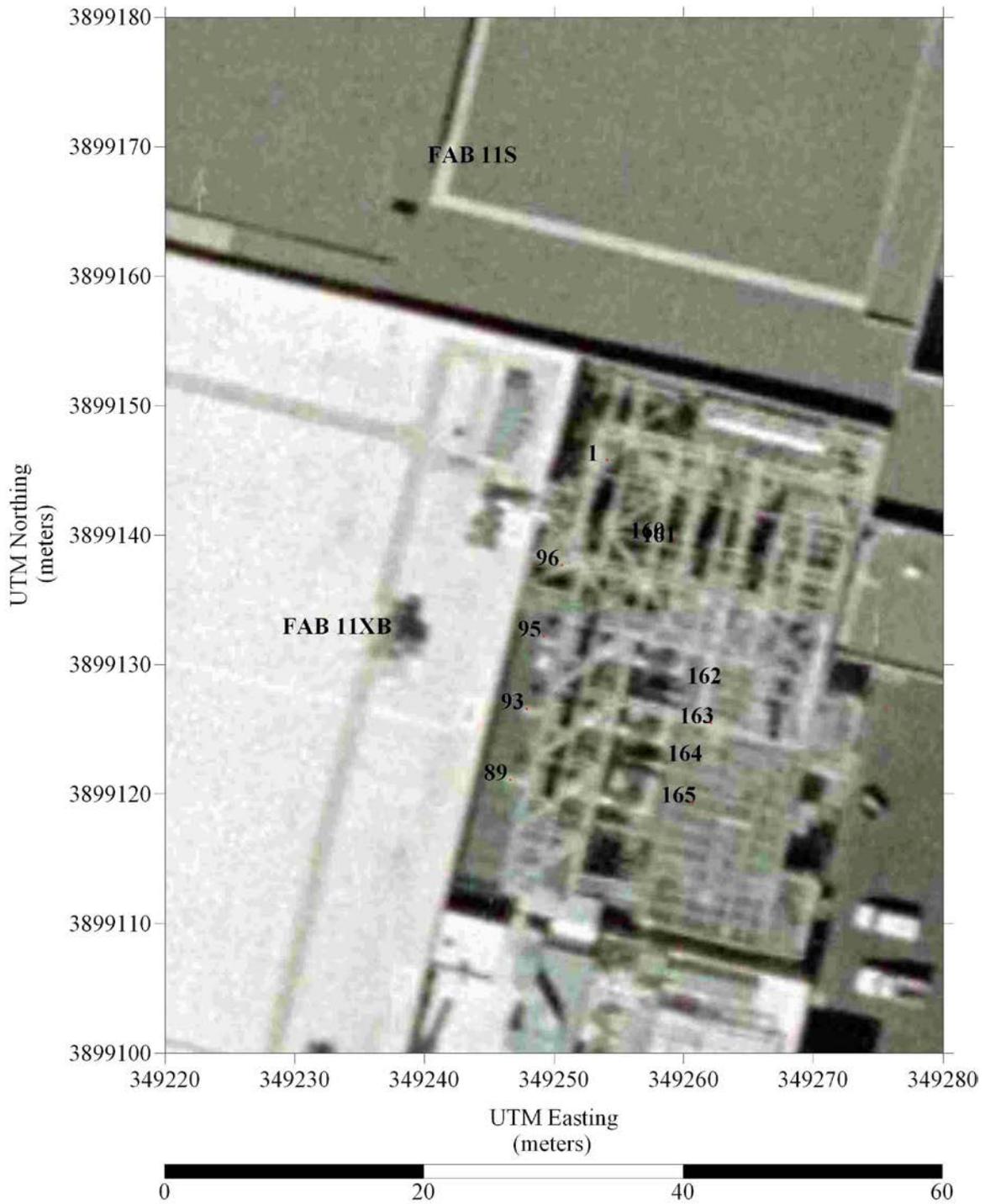


Figure 5-6: Stack Locations near East Side of FAB 11XB

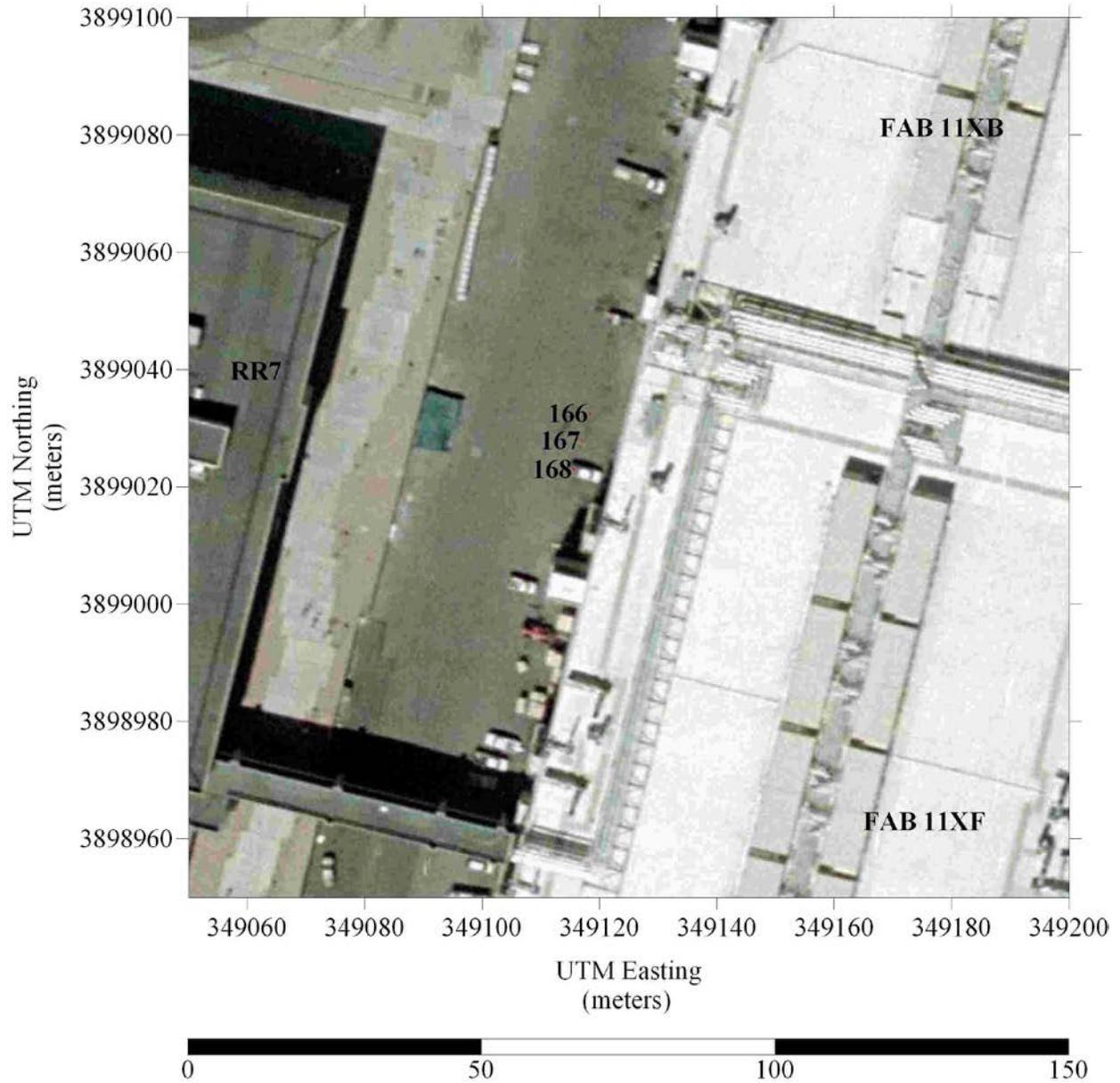


Figure 5-7: Stack Locations near West Side of FAB 11XB

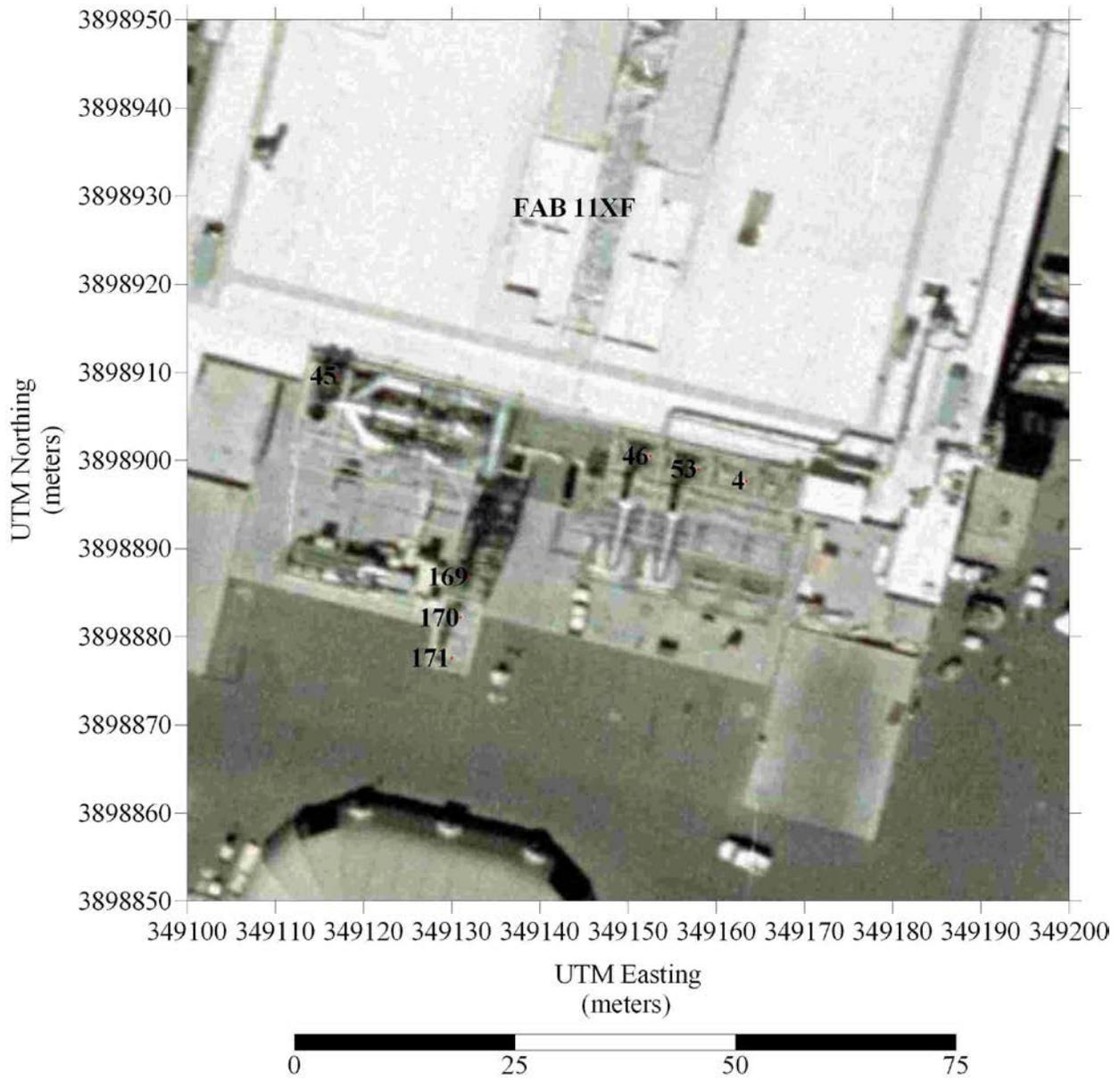


Figure 5-8: Stack Locations near South Side of FAB 11XF

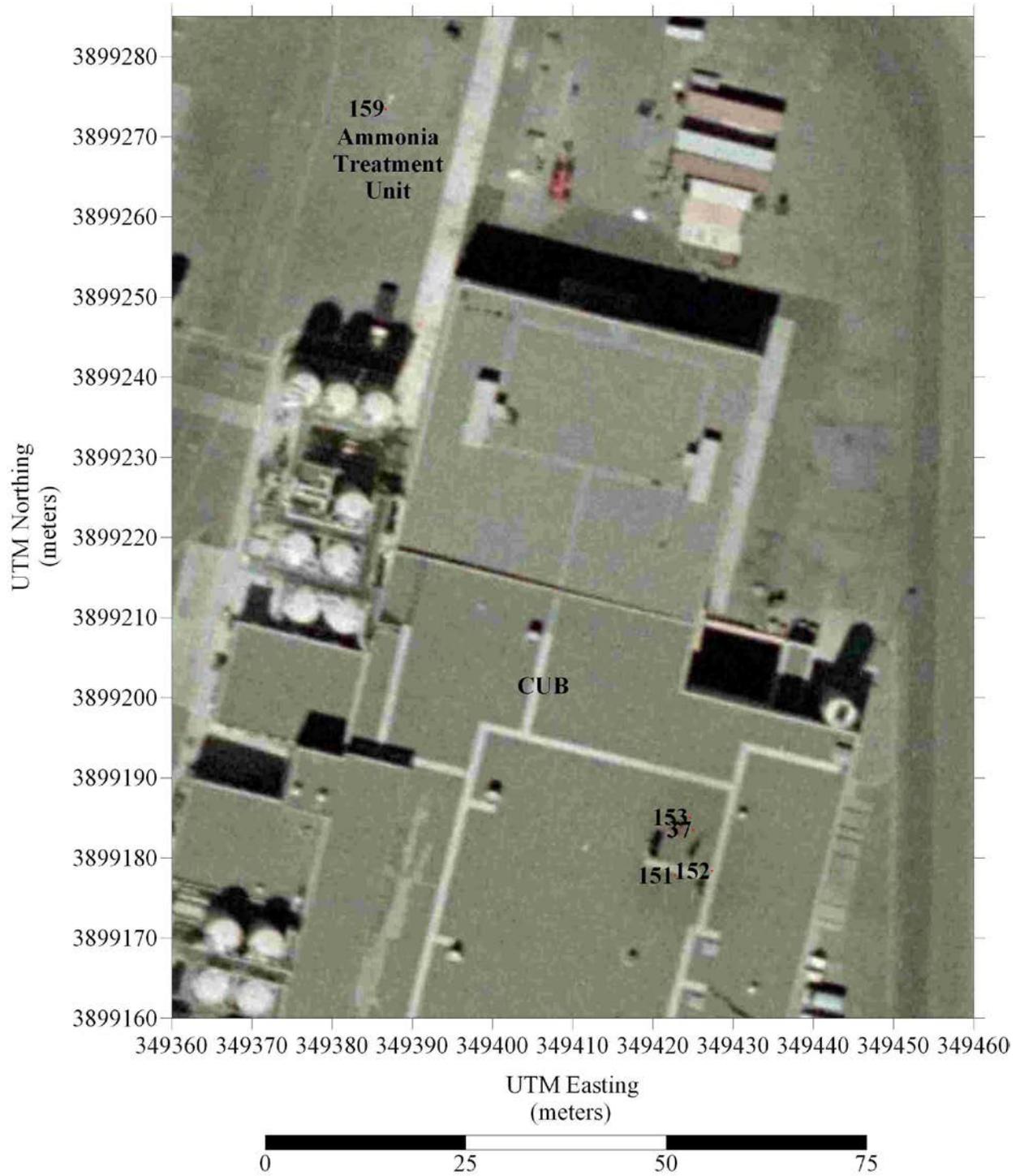


Figure 5-9: Stack Locations near North Side of CUB

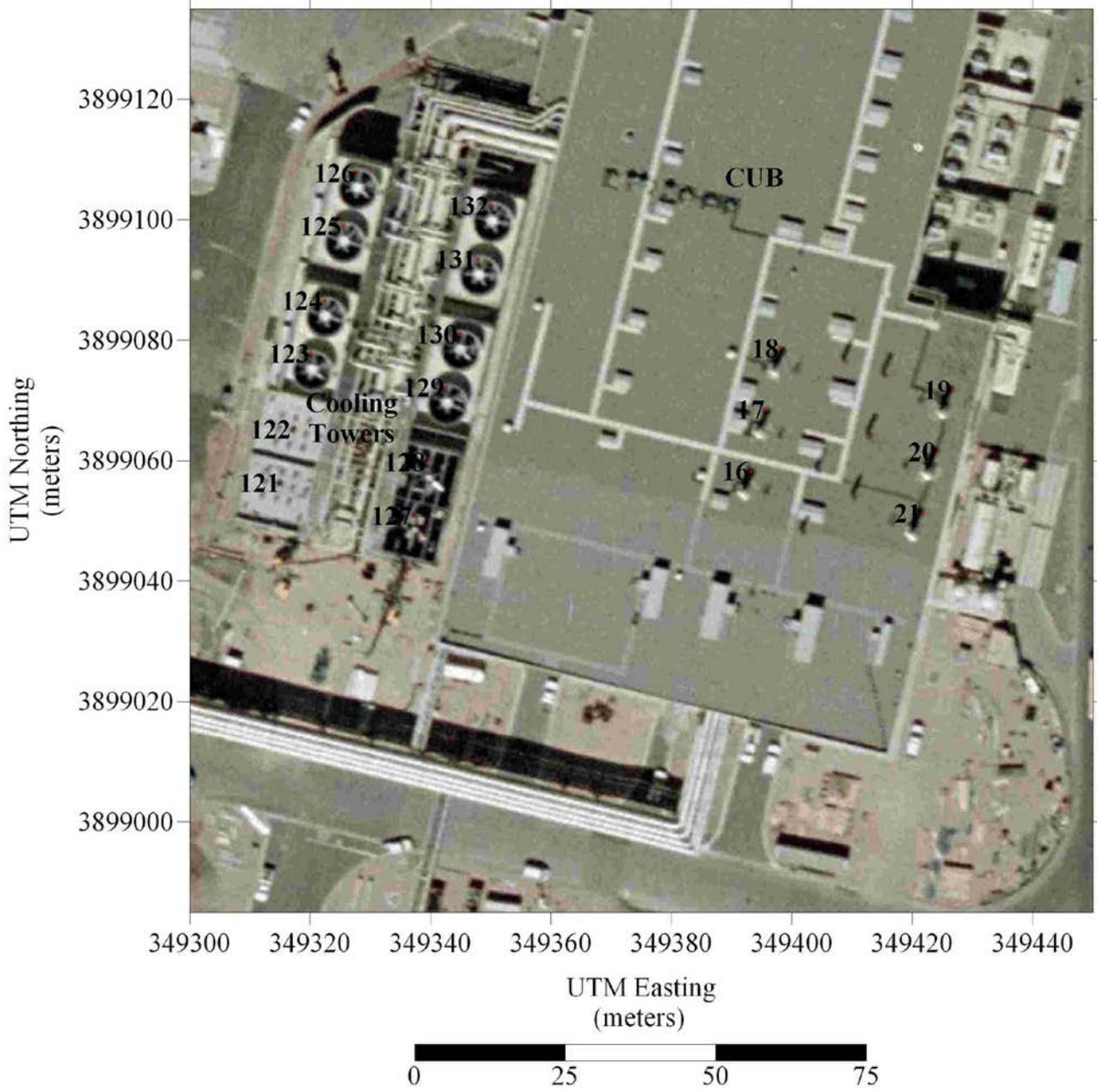


Figure 5-10: Stack Locations near South Side of CUB

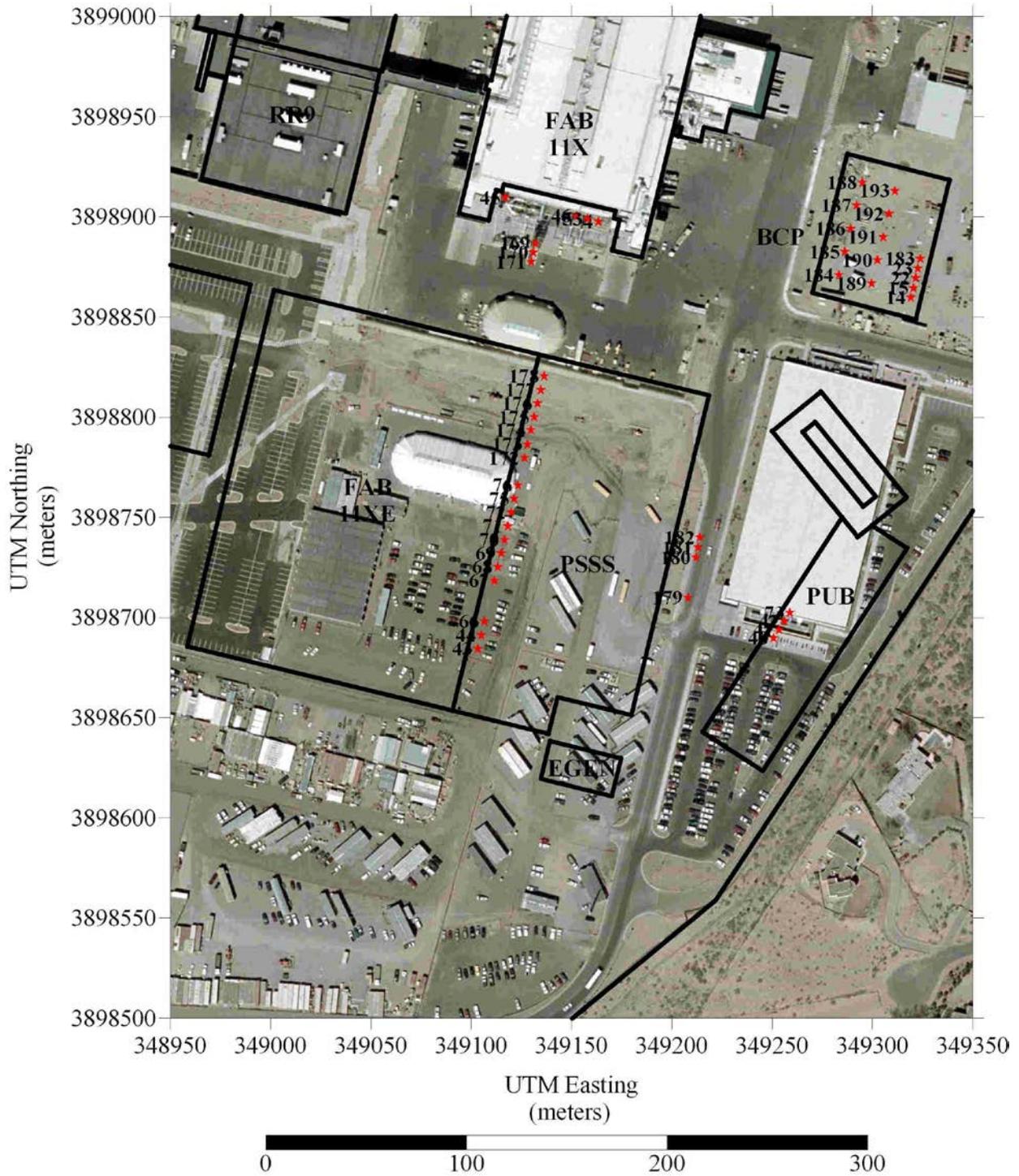


Figure 5-11: Stack Locations New FAB 11XE

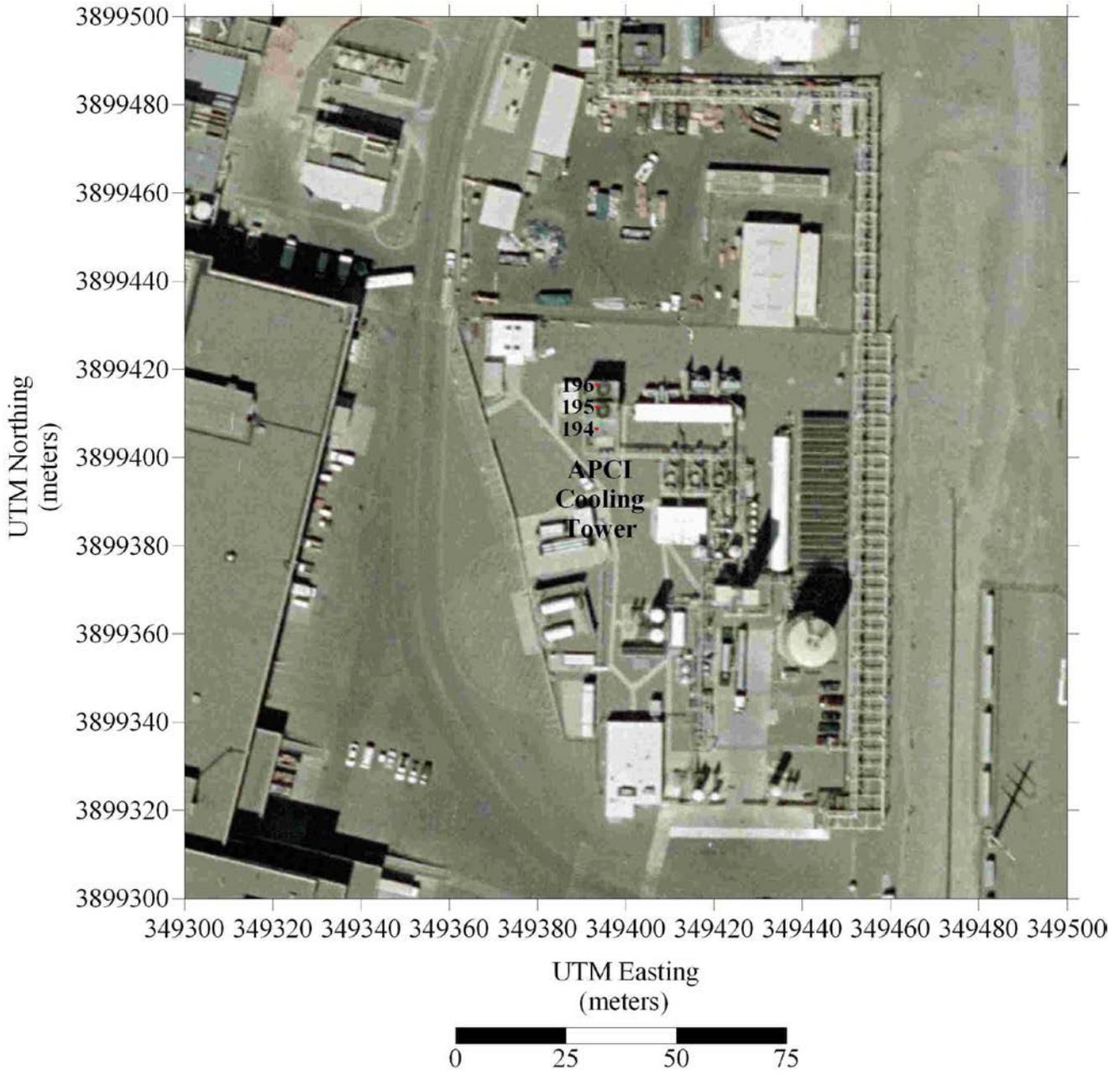


Figure 5-12: Stack Locations North of CUB

Section 6

All Calculations

Show all calculations used to determine both the hourly and annual controlled and uncontrolled emission rates. All calculations shall be performed keeping a minimum of three significant figures. Document the source of each emission factor used (if an emission rate is carried forward and not revised, then a statement to that effect is required). If identical units are being permitted and will be subject to the same operating conditions, submit calculations for only one unit and a note specifying what other units to which the calculations apply. All formulas and calculations used to calculate emissions must be submitted. The "Calculations" tab in the UA2 has been provided to allow calculations to be linked to the emissions tables. Add additional "Calc" tabs as needed. If the UA2 or other spread sheets are used, all calculation spread sheet(s) shall be submitted electronically in Microsoft Excel compatible format so that formulas and input values can be checked. Format all spread sheets and calculations such that the reviewer can follow the logic and verify the input values. Define all variables. If calculation spread sheets are not used, provide the original formulas with defined variables. Additionally, provide subsequent formulas showing the input values for each variable in the formula. All calculations, including those calculations are imbedded in the Calc tab of the UA2 portion of the application, the printed Calc tab(s), should be submitted under this section.

Tank Flashing Calculations: The information provided to the AQB shall include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., NOI, permit, or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis. If Hysis is used, all relevant input parameters shall be reported, including separator pressure, gas throughput, and all other relevant parameters necessary for flashing calculation.

SSM Calculations: It is the applicant's responsibility to provide an estimate of SSM emissions or to provide justification for not doing so. In this Section, provide emissions calculations for Startup, Shutdown, and Routine Maintenance (SSM) emissions listed in the Section 2 SSM and/or Section 22 GHG Tables and the rationale for why the others are reported as zero (or left blank in the SSM/GHG Tables). Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.nmenv.state.nm.us/aqb/permit/app_form.html) for more detailed instructions on calculating SSM emissions. If SSM emissions are greater than those reported in the Section 2, Requested Allowables Table, modeling may be required to ensure compliance with the standards whether the application is NSR or Title V. Refer to the Modeling Section of this application for more guidance on modeling requirements.

Glycol Dehydrator Calculations: The information provided to the AQB shall include the manufacturer's maximum design recirculation rate for the glycol pump. If GRI-Glycalc is used, the full input summary report shall be included as well as a copy of the gas analysis that was used.

Road Calculations: Calculate fugitive particulate emissions and enter haul road fugitives in Tables 2-A, 2-D and 2-E for:

1. If you transport raw material, process material and/or product into or out of or within the facility and have PER emissions greater than 0.5 tpy.
2. If you transport raw material, process material and/or product into or out of the facility more frequently than one round trip per day.

Significant Figures:

A. All emissions standards are deemed to have at least two significant figures, but not more than three significant figures.

B. At least 5 significant figures shall be retained in all intermediate calculations.

C. In calculating emissions to determine compliance with an emission standard, the following rounding off procedures shall be used:

- (1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;
 - (2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; **and**
 - (3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.
 - (4) The final result of the calculation shall be expressed in the units of the standard.
-

See Attachments in Section 20 for information requested in Section 6.

Section 7

Information Used To Determine Emissions

Information Used to Determine Emissions shall include the following:

- If manufacturer data are used, include specifications for emissions units and control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect normal operation.
 - If test data are used, include a copy of the complete test report. If the test data are for an emissions unit other than the one being permitted, the emission units must be identical. Test data may not be used if any difference in operating conditions of the unit being permitted and the unit represented in the test report significantly effect emission rates.
 - If the most current copy of AP-42 is used, reference the section and date located at the bottom of the page. Include a copy of the page containing the emissions factors, and clearly mark the factors used in the calculations.
 - If an older version of AP-42 is used, include a complete copy of the section.
 - If an EPA document or other material is referenced, include a complete copy.
 - Fuel specifications sheet.
 - If computer models are used to estimate emissions, include an input summary (if available) and a detailed report, and a disk containing the input file(s) used to run the model. For tank-flashing emissions, include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.
-

See Attachments in Section 20 for information requested in Section 7.

Section 8

Map(s)

A map such as a 7.5 minute topographic quadrangle showing the exact location of the source. The map shall also include the following:

The UTM or Longitudinal coordinate system on both axes	An indicator showing which direction is north
A minimum radius around the plant of 0.8km (0.5 miles)	Access and haul roads
Topographic features of the area	Facility property boundaries
The name of the map	The area which will be restricted to public access
A graphical scale	

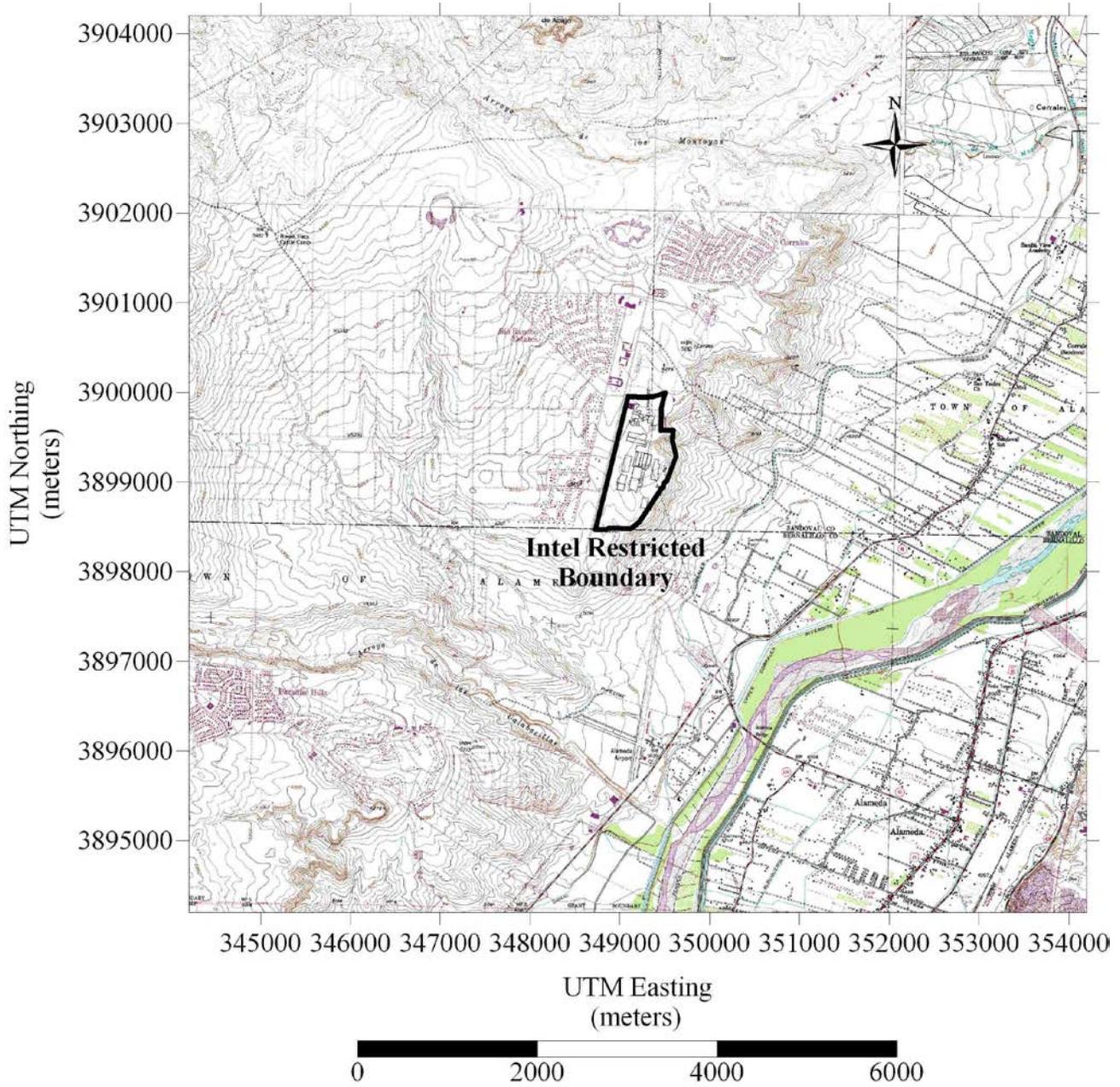


Figure 8-1: Intel Corporation – Rio Rancho Facility Topo Map
7 1/2" Topographical Maps – Los Griegos, Loma Machete, Bernalillo, Alameda

Section 9[not applicable]

Proof of Public Notice

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC)

(This proof is required by: 20.2.72.203.A.14 NMAC "Documentary Proof of applicant's public notice")

I have read the AQB "Guidelines for Public Notification for Air Quality Permit Applications"

This document provides detailed instructions about public notice requirements for various permitting actions. It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

Unless otherwise allowed elsewhere in this document, the following items document proof of the applicant's Public Notification. Please include this page in your proof of public notice submittal with checkmarks indicating which documents are being submitted with the application.

New Permit and **Significant Permit Revision** public notices must include all items in this list.

Technical Revision public notices require only items 1, 5, 9, and 10.

Per the Guidelines for Public Notification document mentioned above, include:

1. A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
 2. A list of the places where the public notice has been posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance. (e.g: post office, library, grocery, etc.)
 3. A copy of the property tax record (20.2.72.203.B NMAC).
 4. A sample of the letters sent to the owners of record.
 5. A sample of the letters sent to counties, municipalities, and Indian tribes.
 6. A sample of the public notice posted and a verification of the local postings.
 7. A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
 8. A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
 9. A copy of the classified or legal ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
 10. A copy of the display ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
 11. A map with a graphic scale showing the facility boundary and the surrounding area in which owners of record were notified by mail. This is necessary for verification that the correct facility boundary was used in determining distance for notifying land owners of record.
-

Section 10

Written Description of the Routine Operations of the Facility

A written description of the routine operations of the facility. Include a description of how each piece of equipment will be operated, how controls will be used, and the fate of both the products and waste generated. For modifications and/or revisions, explain how the changes will affect the existing process. In a separate paragraph describe the major process bottlenecks that limit production. The purpose of this description is to provide sufficient information about plant operations for the permit writer to determine appropriate emission sources.

Intel's Rio Rancho, New Mexico facility uses silicon wafers to manufacture semi-conductor chips for use in the computer industry. The facility consists of buildings in which chips are manufactured (Fabrication Facilities, or Fabs) and buildings containing the support equipment for the Fab including waste tanks, natural gas fired boilers and cooling towers. While manufacturing operations run 24 hours a day, 7 days a week, 365 days a year, the overall factory loading varies based on customer demand.

Manufacturing Process Description

Semiconductors are materials with an electrical conductivity between that of a conductor and an insulator. The manufacturing occurs in a clean environment and process steps involve cleaning with acids or solvents as well as the use of numerous other process chemicals.

Semiconductors are fabricated in batches of silicon wafers and can take anywhere from one to two months to manufacture. The basic fabrication processes are oxidation, photolithography, etching, doping, and layering. During the fabrication process, wafers are cycled through several steps with some steps repeated for various purposes at different points in the process.

Oxidation

Oxidation involves the generation of a silicon dioxide layer on the wafer surface to provide a base for the photolithography process. This layer also insulates and protects the wafer during subsequent processing. In the furnace, the silicon wafer surface oxidizes with steam or a gas such as oxygen to form additional semiconductor material. These processes also use chlorine containing materials such as dichlorosilane which break down during processing and form byproduct emissions of HCl and Cl₂.

Photolithography

Photolithography is the process of imaging a circuit pattern onto a wafer. Photoresist material is spun onto the wafer to create an even layer of coating and then heat treated to remove any solvent remaining in the resist material. A photomask is placed over the wafer and light is projected through the voids in the photomask to form electrical patterns.

After exposure, the wafer is developed in a solution that dissolves the excess photoresist and is then rinsed to remove excess developer solution. The resulting wafer has a silicon dioxide layer exposed for the circuit pattern, with the rest of the wafer being covered with the remaining resist coating. Both the photoresist itself and the material used to remove excess photoresist from the edge of the wafer are organic and generate some VOC emissions during the process.

Etching

Etching chemically removes unwanted materials from layers of the wafer. Wet chemical etching uses acid solutions to etch the exposed layer of silicon dioxide at ambient or elevated temperatures. These acid solutions are a source of HAP emissions. In dry etching, etches are formed above the target layer by ionizing process gases under a vacuum. After etching, the remaining photoresist is removed using dry or liquid stripping compounds. Dry etchants are typically chlorinated or fluorinated gases (e.g. Cl₂, SF₆) which will dissociate in the plasma and form byproduct emissions (e.g. HF, HCl and Cl₂).

Deposition

Deposition processes apply additional layers of silicon, silicon dioxide, or other materials to the wafer. Fluorinated gases are used to periodically clean the reaction chamber for those deposition processes. These compounds dissociate to HF when in contact with the plasma and are a source of HAP emissions.

Cleaning

Various organic and inorganic cleaners are used to clean equipment parts and quartz reaction chambers. Organic cleaners can include isopropanol and ethyl lactate among others and are a source of VOC emissions. Inorganic cleaners include acids such as HF or HNO₃, and bases such as ammonium hydroxide. Cleaning operations are sources of both VOC and HAP emissions.

Air Pollution Control Equipment

Thermal Oxidizers (RTO)

The airstream first enters a Zeolite Concentrator Wheel, where the VOC concentration of the airstream is increased eighteen times while the overall airflow is reduced to 1/18 of the exhaust from the factory. The resulting airflow is routed to the RTO where the majority of the VOCs are removed from the airstream by oxidation. The exiting airstream from the RTO and the Zeolite wheel are exhausted to the atmosphere. The combined concentrator and RTO system has a VOC reduction efficiency of greater than 90%.

Scrubbers

Each fab has many acid gas scrubbers to treat fab process exhaust airstreams that contain primarily inorganic acids. The factory exhausts are sent through a packed bed with water flowing through it. The majority of the gases are transferred out of the air stream into the water stream. The scrubber water streams are sent to the Acid Waste Neutralization (AWN) wastewater treatment system where it is neutralized before being sent to the Publicly Owned Treatment Works (POTW). The treated exhaust streams are then sent out to the atmosphere.

Support Equipment

Boilers

The boilers supply steam to the factories. Boiler loading requirements vary based on factory demand and outdoor temperatures with colder temperatures requiring more load. The boilers are equipped with the Autoflame™ flame technology, which allows for micromodulation of the air/fuel ratio controls on each boiler. Micromodulation allows the operator to have increased control of the combustion process thereby reducing NO_x and CO emissions because the burners are able to achieve near complete combustion. The boilers operate predominantly on natural gas, but are equipped to operate on diesel fuel #2 in the event of an interruption of the natural gas supply.

Emergency generators/Fire Pumps

Emergency generators back up all critical Life Safety Systems (LSS) at the site. The generators combust diesel fuel #2 and are routinely tested to ensure proper operation.

Cooling towers

The facility has mechanically induced (i.e. fan driven) cooling towers that are open to the atmosphere. The cooling towers are used to dissipate the large heat loads generated by the factory and to condition the incoming air to the correct temperature required by the factory. The heat is removed by air handlers whose heat is ultimately rejected to the atmosphere from the cooling towers. Each emission unit identified in Section 2 of the application is the individual cooling tower cell. A single cooling tower unit typically consists of multiple cells. Intel uses sodium bromide as a biocide in the cooling towers. Intel has assumed, conservatively, that the bromoform found during water sampling is emitted to the atmosphere. Cooling tower demand is highest in the warmer months and is reduced in the cooler months.

Tanks

Liquid waste for disposal is collected in tanks prior to shipment or to onsite treatment. Some chemicals that are used for acid waste neutralization and water purification are also stored in tanks. Tanks containing primarily inorganic wastes have exhaust that is ducted to scrubbers. Solvent tanks are equipped with a pressure/vacuum relief valve and a flame arrestor to maintain the tanks' internal pressures and prevent explosions caused by potential external ignition sources.

Solvent Waste Collection

The solvent waste tanks are fixed roof tanks with varying types of ancillary equipment. Each unit is equipped with a pressure/vacuum relief valve and a flame arrestor to maintain the tanks' internal pressures and prevent explosions caused by potential external ignition sources.

Acid Waste Neutralization

The Acid Waste Neutralization (AWN) system ensures that the wastewater is within permitted limits before being discharged to the Publicly Owned Treatment Works (POTW). Treatment consists of adding acid or caustic in the proper proportions to ensure that the permit limits are achieved. The AWN tanks are connected to the scrubbed exhaust system.

Wastewater Treatment Systems

Intel operates various wastewater treatment systems to ensure that the site wastewater permit limits are met. Many of the treatment systems involve collection tanks prior to the treatment system. Tanks that contain primarily inorganic acids are connected to the scrubbed exhaust system.

Ammonia Treatment System

The ammonia treatment system will remove ammonia from the wastewater prior to discharge to the POTW. The treatment process involves stripping the ammonia from the wastewater and sending the air stream to a catalytic oxidizer. The catalytic oxidizer burns natural gas and therefore has combustion emissions, as well as additional emissions of nitrogen oxides (NO_x) from the destruction of the ammonia.

Bulk Specialty Solvent Waste Treatment System

The Basic Specialty Solvent Waste (BSSW) treatment system is designed to treat a RCRA defined reactive waste to make it safe for offsite shipment. The treatment occurs in a tank that is exhausted to a thermal processing unit (TPU) abatement device to remove the VOCs and HAPs. The TPU burns natural gas and therefore are a source of NO_x, CO, SO₂, VOC, and PM emissions.

Section 11

Source Determination

Source submitting under 20.2.70, 20.2.72, and 20.2.74 NMAC

Sources applying for a construction permit, PSD permit, or operating permit shall evaluate surrounding and/or associated sources (including those sources directly connected to this source for business reasons) and complete this section. Responses to the following questions shall be consistent with the Air Quality Bureau's permitting guidance, Single Source Determination Guidance, which may be found on the Applications Page in the Permitting Section of the Air Quality Bureau website.

Typically, buildings, structures, installations, or facilities that have the same SIC code, that are under common ownership or control, and that are contiguous or adjacent constitute a single stationary source for 20.2.70, 20.2.72, and 20.2.74 NMAC applicability purposes. Submission of your analysis of these factors in support of the responses below is optional, unless requested by NMED.

A. Identify the emission sources evaluated in this section (list and describe):

Intel Corporation's Rio Rancho, New Mexico facility, permit 325-M-11R2, uses silicon wafers to manufacture semi-conductor chips for use in the computer industry. The facility consists of buildings in which chips are manufactured (Fabrication Facilities or Fabs) and buildings containing the support equipment for the Fab.

B. Apply the 3 criteria for determining a single source:

SIC Code: Surrounding or associated sources belong to the same 2-digit industrial grouping (2-digit SIC code) as this facility, OR surrounding or associated sources that belong to different 2-digit SIC codes are support facilities for this source.

Yes **No**

Common Ownership or Control: Surrounding or associated sources are under common ownership or control as this source.

Yes **No**

Contiguous or Adjacent: Surrounding or associated sources are contiguous or adjacent with this source.

Yes **No**

C. Make a determination:

The source, as described in this application, constitutes the entire source for 20.2.70, 20.2.72, or 20.2.74 NMAC applicability purposes. If in "A" above you evaluated only the source that is the subject of this application, all "**YES**" boxes should be checked. If in "A" above you evaluated other sources as well, you must check **AT LEAST ONE** of the boxes "**NO**" to conclude that the source, as described in the application, is the entire source for 20.2.70, 20.2.72, and 20.2.74 NMAC applicability purposes.

The source, as described in this application, **does not** constitute the entire source for 20.2.70, 20.2.72, or 20.2.74 NMAC applicability purposes (A permit may be issued for a portion of a source). The entire source consists of the following facilities or emissions sources (list and describe):

Section 12 [not applicable]

Section 12.A

PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

A PSD applicability determination for all sources. For sources applying for a significant permit revision, apply the applicable requirements of 20.2.74.AG and 20.2.74.200 NMAC and to determine whether this facility is a major or minor PSD source, and whether this modification is a major or a minor PSD modification. It may be helpful to refer to the procedures for Determining the Net Emissions Change at a Source as specified by Table A-5 (Page A.45) of the EPA New Source Review Workshop Manual to determine if the revision is subject to PSD review.

A. This facility is:

- a minor PSD source before and after this modification (if so, delete C and D below).
- a major PSD source before this modification. This modification will make this a PSD minor source.
- an existing PSD Major Source that has never had a major modification requiring a BACT analysis.
- an existing PSD Major Source that has had a major modification requiring a BACT analysis
- a new PSD Major Source after this modification.

B. This facility **[is or is not]** one of the listed 20.2.74.501 Table I – PSD Source Categories. The “project” emissions for this modification are **[significant or not significant]**. **[Discuss why.]** The “project” emissions listed below **[do or do not]** only result from changes described in this permit application, thus no emissions from other **[revisions or modifications, past or future]** to this facility. Also, specifically discuss whether this project results in “de-bottlenecking”, or other associated emissions resulting in higher emissions. The project emissions (before netting) for this project are as follows [see Table 2 in 20.2.74.502 NMAC for a complete list of significance levels]:

- a. NOx: **XX.X** TPY
- b. CO: **XX.X** TPY
- c. VOC: **XX.X** TPY
- d. SOx: **XX.X** TPY
- e. TSP (PM): **XX.X** TPY
- f. PM10: **XX.X** TPY
- g. PM2.5: **XX.X** TPY
- h. Fluorides: **XX.X** TPY
- i. Lead: **XX.X** TPY
- j. Sulfur compounds (listed in Table 2): **XX.X** TPY
- k. GHG: **XX.X** TPY

C. Netting **[is required, and analysis is attached to this document.] OR [is not required (project is not significant)] OR [Applicant is submitting a PSD Major Modification and chooses not to net.]**

D. BACT is **[not required for this modification, as this application is a minor modification.] OR [required, as this application is a major modification. List pollutants subject to BACT review and provide a full top down BACT determination.]**

E. If this is an existing PSD major source, or any facility with emissions greater than 250 TPY (or 100 TPY for 20.2.74.501 Table 1 – PSD Source Categories), determine whether any permit modifications are related, or could be considered a single project with this action, and provide an explanation for your determination whether a PSD modification is triggered.

Section 13

Discussion Demonstrating Compliance With Each Applicable State & Federal Regulation

Provide a discussion demonstrating compliance with applicable state & federal regulation. If there is a state or federal regulation (other than those listed here) for your facility's source category that does not apply to your facility, but seems on the surface that it should apply, add the regulation to the appropriate table below and provide the analysis. Examples of regulatory requirements that may or may not apply to your facility include 40 CFR 60 Subpart OOO (crushers), 40 CFR 63 Subpart HHH (HAPs), or 20.2.74 NMAC (PSD major sources). We don't want a discussion of every non-applicable regulation, but if there is questionable applicability, explain why it does not apply. All input cells should be filled in, even if the response is 'No' or 'N/A'.

In the "Justification" column, identify the criteria that are critical to the applicability determination, numbering each. For each unit listed in the "Applies to Unit No(s)" column, after each listed unit, include the number(s) of the criteria that made the regulation applicable. For example, TK-1 & TK-2 would be listed as: TK-1 (1, 3, 4), TK-2 (1, 2, 4). Doing so will provide the applicability criteria for each unit, while also minimizing the length of these tables.

As this table will become part of the SOB, please do not change the any formatting in the table, especially the width of the table.

If this application includes any proposed exemptions from otherwise applicable requirements, provide a narrative explanation of these proposed exemptions. These exemptions are from specific applicable requirements, which are spelled out in the requirements themselves, not exemptions from 20.2.70 NMAC or 20.2.72 NMAC.

<u>STATE REGULATIONS CITATION</u>	Title	Applies to Entire Facility	Applies to Unit No(s).	Federally Enforceable	Does Not Apply	JUSTIFICATION: Identify the applicability criteria, numbering each (i.e. 1. Post 7/23/84, 2. 75 m ³ , 3. VOL)
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	X				Regulates the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide in the ambient air.
20.2.7 NMAC	Excess Emissions	X		X		The rule applies to any emission source subject to an emission limit.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide		blr-32-gd3-1s to 10s, ecs-boi-97s, ecs-boi-98s, bcp boiler 7-11	X		This facility has gas burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit.
20.2.34 NMAC	Oil Burning Equipment: NO ₂				X	This facility has no oil burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit.
20.2.61.109 NMAC	Smoke & Visible Emissions				X	This does not apply to any equipment at the site per 20.2.61.10.109 NMAC "...stationary combustion equipment which is regulated by Parts 20.2.10 NMAC through 20.2.18 NMAC, 20.2.37 NMAC, and 20.2.42 NMAC, and any other Part of Chapter 2 which specifically limits particulate emissions is exempted from this Part."
20.2.70 NMAC	Operating Permits	X		X		Source is major for GHGs.
20.2.71	Operating	X		X		Yes, this facility is subject to 20.2.70 NMAC and is in turn

<u>STATE REGU- LATIONS CITATION</u>	Title	Applies to Entire Facility	Applies to Unit No(s).	Federally Enforce- able	Does Not Apply	JUSTIFICATION: Identify the applicability criteria, numbering each (i.e. 1. Post 7/23/84, 2. 75 m ³ , 3. VOL)
NMAC	Permit Fees					subject to 20.2.71 NMAC.
20.2.72 NMAC	Construction Permits	X		X		This facility is subject to 20.2.72 NMAC and NSR Permit number: 325-M11R2
20.2.73 NMAC	NOI & Emissions Inventory Requirements	X		X		20.2.73.300 NMAC applies. All Title V major sources meet the applicability requirements of 20.2.73.300 NMAC.
20.2.74 NMAC	Permits – PSD				X	This facility is not a PSD major source
20.2.75 NMAC	Construction Permit Fees	X		X		This facility is subject to 20.2.72 NMAC and is in turn subject to 20.2.75 NMAC.
20.2.77 NMAC	New Source Performance		blr-32- gd3-1s to 10s, ecs-boi- 97s, ecs- boi-98s, bcp boiler 8- 11	X		This is a stationary source which is subject to the requirements of 40 CFR Part 60, as amended through December 31, 2010. Specifically Subpart A, Subpart Dc and IIII.
20.2.78 NMAC	Emission Standards for HAPS				X	No 40 CFR Part 61 standard applies, as amended through December 31, 2010.
20.2.79 NMAC	Permits – Nonattainment Areas				X	This facility is not located in a nonattainment area.
20.2.80 NMAC	Stack Heights	X		X		20.2.80.109 NMAC applicable.
20.2.82 NMAC	MACT Standards for source categories of HAPS		Some egens and fire pumps	X		Intel has RICE, which fall under the area source requirements.

<u>FEDERAL REGU- LATIONS CITATION</u>	Title	Applies to Entire Facility	Applies to Unit No(s).	Federally Enforce- able	Does Not Apply	JUSTIFICATION:
40 CFR 50	NAAQS	X		X		Defined as applicable at 20.2.70.7.E.11, Any national ambient air quality standard
NSPS 40 CFR 60, Subpart A	General Provisions		blr-32- gd3-1s to 10s, ecs- boi-97s, ecs-boi- 98s, bcp boiler 8- 11, some egens and fire pumps	X		Subject to Subpart Dc and IIII.
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for Electric Utility Steam Generating Units				X	Intel's boilers aren't "electric utility steam generating units within the definition of Subpart Da, since the boilers aren't used to generate electricity.
NSPS 40 CFR60.40b Subpart Db	Electric Utility Steam Generating Units				X	Intel's boilers aren't "electric utility steam generating units within the definition of Subpart Da, since the boilers aren't used to generate electricity.
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984				X	The rule excludes Nos. 2 through 6 fuel oils and diesel fuels from the definition of "petroleum liquids" and therefore does not apply to Intel.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984				X	The 25,000 gallon diesel fuel tank diesel has a vapor pressure less than 15.0 kPa (2.17 psi).

FEDERAL REGU- LATIONS CITATION	Title	Applies to Entire Facility	Applies to Unit No(s).	Federally Enforce- able	Does Not Apply	JUSTIFICATION:
NSPS 40 CFR Part 60 Subpart JJJ	Stationary Spark Ignition Internal Combustion Engines				X	None of the emergency generator and fire water pump engines are spark ignition engines.
NESHAP 40 CFR 61 Subpart A	General Provisions				X	None of the equipment at Intel is subject to any NESHAP
MACT 40 CFR 63, Subpart A	General Provisions		Some egens & fire pumps		X	Subject to Subpart ZZZZ.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)		Some egens & fire pumps	X		Intel has RICE, which fall under the area source requirements.
NESHAP 40 CFR 64	Compliance Assurance Monitoring		All Thermal Oxidizers	X		CAM plans required for RCTOs at time of renewal of the Title V permit.
NESHAP 40 CFR 68	Chemical Accident Prevention				X	This requirement currently does not apply.
Title VI – 40 CFR 82	Protection of Stratospheric Ozone	X		X		Intel has equipment containing ozone depleting substances.
CAA Section 112(r)					X	This requirement currently does not apply.
NSPS 40 CFR60.40c Subpart Dc	Small Industrial- Commercial- Institutional Steam Generating Units		blr-32- gd3-1s to 10s, ecs- boi-97s, ecs-boi- 98s, bcp boiler 8- 11	X		Boilers listed exceed the size requirements.
NSPS 40 CFR Part 60 Subpart III	Stationary Compression Ignition Internal Combustion Engines		Some egens & Fire Pumps	X		Applies to some of the emergency generators and fire pumps based on sizes and start up dates.

<u>FEDERAL REGU- LATIONS CITATION</u>	Title	Applies to Entire Facility	Applies to Unit No(s).	Federally Enforce- able	Does Not Apply	JUSTIFICATION:
MACT 40 CFR 63 Subpart JJJJ	for Industrial, Commercial, and Institutional Boilers Area Sources				X	<p>MACT Subpart JJJJ exempts “gas fired boilers.” All Intel boilers meet definition of “gas fired boiler” (e) A gas-fired boiler as defined in this subpart.</p> <p><i>Gas-fired boiler</i> includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.</p>

Section 14

Operational Plan to Mitigate Emissions

(submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

- Title V Sources** (20.2.70 NMAC): By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Emissions During Startups, Shutdowns, and Emergencies** defining the measures to be taken to mitigate source emissions during startups, shutdowns, and emergencies as required by 20.2.70.300.D.5(f) and (g) NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.
- NSR** (20.2.72 NMAC), **PSD** (20.2.74 NMAC) **& Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Source Emissions During Malfunction, Startup, or Shutdown** defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown as required by 20.2.72.203.A.5 NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.
- Title V** (20.2.70 NMAC), **NSR** (20.2.72 NMAC), **PSD** (20.2.74 NMAC) **& Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has established and implemented a Plan to Minimize Emissions During Routine or Predictable Startup, Shutdown, and Scheduled Maintenance through work practice standards and good air pollution control practices as required by 20.2.7.14.A and B NMAC. This plan shall be kept on site or at the nearest field office to be made available to the Department upon request. This plan should not be submitted with this application.
-

Section 15 [not applicable]

Alternative Operating Scenarios

(submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

Alternative Operating Scenarios: Provide all information required by the department to define alternative operating scenarios. This includes process, material and product changes; facility emissions information; air pollution control equipment requirements; any applicable requirements; monitoring, recordkeeping, and reporting requirements; and compliance certification requirements. Please ensure applicable Tables in this application are clearly marked to show alternative operating scenario.

Section 16 [not applicable]

Air Dispersion Modeling

NSR (20.2.72 NMAC) and PSD (20.2.74 NMAC) Modeling: Provide an air quality **dispersion modeling** demonstration (if applicable) as outlined in the Air Quality Bureau's Dispersion Modeling Guidelines. If air dispersion modeling has been waived for this permit application, attach the AQB Modeling Section modeling waiver documentation.

SSM Modeling: Applicants must conduct dispersion modeling for the total short term emissions using realistic worst case scenarios following guidance from the Air Quality Bureau's dispersion modeling section. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.nmenv.state.nm.us/aqb/permit/app_form.html) for more detailed instructions on SSM emissions modeling requirements.

Title V (20.2.70 NMAC) Modeling: Title V applications must specify the NSR Permit number for which air quality dispersion modeling was last submitted. Additionally, Title V facilities reporting new SSM emissions require modeling or a modeling waiver to demonstrate compliance with standards.

Section 17

Compliance Test History

(submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

To show compliance with existing NSR permits conditions, you must submit a compliance test history. The table below provides an example.

2007-Current Compliance Test History

Unit/Stack No.*	Test Description	Quarter Test Conducted
Boiler Testing	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 0325-M9	Q1'07
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9.	Q1'07
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9.	Q2'07
Thermal Oxidizers Scrubbers	Tested in accordance with EPA test methods for Hazardous Air Pollutants as required by NSR permit 0325-M9.	Q2'07
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9.	Q3'07
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9.	Q4'07
Boiler Testing	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 0325-M9	Q1'08
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9.	Q1'08
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9.	Q2'08
Thermal Oxidizers Scrubbers	Tested in accordance with EPA test methods for Hazardous Air Pollutants as required by NSR permit 0325-M9.	Q2'08
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9.	Q3'08
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9.	Q4'08
Boiler Testing	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 0325-M9	Q1'09
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9.	Q1'09
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9.	Q2'09
Thermal Oxidizers Scrubbers	Tested in accordance with EPA test methods for Hazardous Air Pollutants as required by NSR permit 0325-M9.	Q2'09
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9.	Q3'09
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9.	Q4'09
Boiler Testing	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 0325-M9	Q1'10
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9.	Q1'10
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9.	Q2'10
Thermal Oxidizers	Tested in accordance with EPA test methods for Hazardous Air Pollutants	Q2'10

Unit/Stack No.*	Test Description	Quarter Test Conducted
Scrubbers	as required by NSR permit 0325-M9.	
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9.	Q3'10
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M9 and 0325-M10.	Q4'10
Boiler Testing	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 0325-M10.	Q1'11
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M10.	Q1'11
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M10 and 0325-M11.	Q2'11
Thermal Oxidizers Scrubbers	Tested in accordance with EPA test methods for Hazardous Air Pollutants as required by NSR permit 0325-M10 and 0325-M11.	Q2'11
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M11.	Q3'11
Ammonia Treatment System	Tested in accordance with EPA test methods for NOx, CO and NH3 as required by NSR permit 0325-M11	Q3'11
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M11.	Q4'11
Boiler Testing	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 0325-M11.	Q1'12
Thermal Oxidizers	Tested in accordance with EPA test methods for Volatile Organic Compounds as required by NSR permit 0325-M11.	Q1'12

* Equipment listed in the table is intended to reflect that all equipment in operation and required to be tested at the time the test was conducted were tested.

Section 18 **[not applicable]**

Addendum for Streamline Applications

Do not print this section unless this is a streamline application.

Streamline Applications do not require a complete application. Submit Sections 1-A, 1-B, 1-D, 1-F, 1-G, 2-A, 2-C, 2-D, 2-E, 2-G thru L, Sections 3 thru 8, Section 13, Section 18, Section 22, and Section 23 (Certification). Other sections may be required at the discretion of the Department. 20.2.72.202 NMAC Exemptions do not apply to Streamline sources. 20.2.72.219 NMAC revisions and modifications do not apply to Streamline sources, thus 20.2.72.219 type actions require a complete new application submittal. Please do not print sections of a streamline application that are not required.

18-A: Streamline Category	
1	<p>Indicate under which part of 20.2.72.301.D this facility is applying. Refer to the forth column of Table 18-D below, to assist in this determination:</p> <p> <input type="checkbox"/> 20.2.72.301.D(1) NMAC <input type="checkbox"/> 20.2.72.301.D(2) NMAC <input type="checkbox"/> 20.2.72.301.D(3) NMAC </p>

18-B: Streamline Applicability Criteria		Answer (yes/no)
1	<p>Does the source category for this facility meet one of those listed in the following table? (20.2.72.301.A NMAC)</p> <p>20.2.72.501 Table 2 – Permit Streamlining Source Class Categories</p> <ol style="list-style-type: none"> 1. Reciprocating internal combustion engines including portable or temporary engines 2. Turbines 	<input type="checkbox"/> Yes <input type="checkbox"/> No
2	<p>If this facility is a compressor station, does it meet the definition of a “Compressor station” below? (20.2.72.301.D NMAC)</p> <p>“Compressor station” means a facility whose primary function is the extraction of crude oil, natural gas, or water from the earth with compressors, or movement of any fluid, including crude oil or natural gas, or products refined from these substances through pipelines or the injection of natural gas or CO2 back into the earth using compressors. A compressor station may include engines to generate power in conjunction with the other functions of extraction, injection or transmission and may contain emergency flares. A compressor station may have auxiliary equipment which emits <u>small quantities</u> of regulated air contaminants, including but not limited to, separators, de-hydration units, heaters, treaters and storage tanks, provided the equipment is located within the same property boundaries as the compressor engine (underline added). (20.2.72.301.A NMAC)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
3	<p>Will the source operate in compliance with all applicable state and federal regulations, including federal new source performance standards incorporated by 20.2.77 NMAC and permit conditions? (20.2.72.305.B NMAC)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
4	<p>Will the fuel combusted at this facility be produced natural gas, sweet natural gas, liquid petroleum gas, or fuel gas containing 0.1 grain of total sulfur or less per dry standard cubic foot; or refinery grade diesel or No. 2 fuel oil that is not a blend containing waste oils or solvents and contains less than 0.3% by weight sulfur? (20.2.72.306 NMAC)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No

5	Will all spark ignited gas-fired or any compression ignited dual fuel-fired engine which operates <u>with a non-selective catalytic converter</u> be equipped <u>and</u> operated with an automatic air-fuel ratio (AFR) controller which maintains AFR in the range required to minimize NOx emissions, as recommended by the manufacturer? (20.2.72.306 NMAC)	<input type="checkbox"/> Yes <input type="checkbox"/> No
6	Has payment of <u>all</u> fees that are specified in 20.2.75 NMAC (Construction Permit Fees), as payable at the time the application is submitted, been included with the application package? (20.2.72.302.15 NMAC)	<input type="checkbox"/> Yes <input type="checkbox"/> No
7	Is the answer to each of the above questions, #1 through #6, 'Yes'? If the answer to this question is "No", this facility does not qualify for a streamline permit.	<input type="checkbox"/> Yes <input type="checkbox"/> No
8	Will the facility, either before or after construction or modification, have a total potential to emit of any regulated air contaminant ² greater than 200 tons per year (tpy) of any one regulated air pollutant (CO, NOx, SO2, or VOC)? (20.2.72.301.B.2 NMAC); "Potential to emit" or "potential emissions" means the maximum capacity of a stationary source to emit a regulated air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitations or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.	<input type="checkbox"/> Yes <input type="checkbox"/> No
9	Is the facility a "major stationary source" as defined in 20 NMAC 2.74? (20.2.72.301.B.1 NMAC)	<input type="checkbox"/> Yes <input type="checkbox"/> No
10	Is this source subject 20.2.78 NMAC, other than 40CFR61 Subpart M <u>National Emission Standard for Asbestos</u> ? (20.2.72.301.B.3 NMAC)	<input type="checkbox"/> Yes <input type="checkbox"/> No
11	Is this a source of potential air toxic emissions (20 NMAC 2.72. 400-499)? (20.2.72.301.B.3 NMAC)	<input type="checkbox"/> Yes <input type="checkbox"/> No
12	Will the reciprocating internal combustion (IC) engines and/or turbines be located at a petroleum refinery, chemical manufacturing plant, bulk gasoline terminal, natural gas processing plant, or at any facility containing sources in addition to IC engines and/or turbines for which an air quality permit is required through state or federal air quality regulations in the absence of the (IC) engines and/or turbines? (20.2.72.301.B.4 NMAC)	<input type="checkbox"/> Yes <input type="checkbox"/> No
13	Will the proposed facility be located within any of the 20.2.72.301.B.5 exclusion areas specified in the Air Dispersion Modeling Guidelines ¹ , Table: <u>Areas Where Streamline Permits Are Prohibited ?</u> (20.2.72.301.B.5 NMAC) http://www.nmenv.state.nm.us/aqb/modeling	<input type="checkbox"/> Yes <input type="checkbox"/> No
14	Will the proposed facility's impact area intersect any of the areas specified in the Air Dispersion Modeling Guidelines ¹ , Table: <u>Areas Where Streamline Permits Are Prohibited ?</u> (20.2.72.301.B.5 NMAC) http://www.nmenv.state.nm.us/aqb/modeling	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
15	Is the answer to each of the above questions, #8 through #14, 'No'? If the answer to this question is "No", this facility does not qualify for a streamline permit.	<input type="checkbox"/> Yes <input type="checkbox"/> No

¹ The Air Dispersion Modeling Guidelines contain a section on streamline permitting. The table mentioned above can be found within those guidelines at <http://www.nmenv.state.nm.us/aqb/modeling>

² The potential to emit for nitrogen dioxide shall be based on total oxides of nitrogen

18-C: Streamline Location Restrictions		Answer (yes/no)	Identify: Name and Distance (km)
1	Will the distance from the nearest property boundary to the nearest school, residence, office building or occupied structure, excluding the immediate facility complex be greater than one (1.0) km? (20.2.72.301.B.6.a NMAC)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Will the distance from the nearest property boundary to the nearest state park, Class II wilderness or wildlife refuge, historic park, state recreation area be greater than three (3.0) km? (20.2.72.301.B.6.b NMAC) The <u>Air Dispersion Modeling Guidelines</u> ¹ , Table: <u>List Of State Parks, Class II Wilderness Areas, Class II National Wildlife Refuge, National Historic Parks, State Recreation Areas, and Class I Areas</u> contains a list of most of these areas in New Mexico, but may not include new areas designated since the modeling guidelines were published.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Will the distance from the nearest property boundary to the nearest community with a population of more than 20,000 people be greater than three (3.0) km? (20.2.72.301.B.6 NMAC).b	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	Will the distance from the nearest property boundary to the nearest community with a population of more than 40,000 people be greater than 10 km? (20.2.72.301.B.6.c NMAC)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Will the distance from the nearest property boundary to the nearest Class I area be greater than 30 km? (20.2.72.301.B.6.d NMAC) The <u>Air Dispersion Modeling Guidelines</u> ¹ , Table: <u>List Of State Parks, Class II Wilderness Areas, Class II National Wildlife Refuge, National Historic Parks, State Recreation Areas, and Class I Areas</u> contains a list of most of these areas in New Mexico, but may not include new areas designated since the modeling guidelines were published.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	Will the distance from the nearest property boundary to Bernalillo County be greater than 15 km? (20.2.72.301.B.7 NMAC)	<input type="checkbox"/> Yes <input type="checkbox"/> No	-NA-
7	Is the answer to all of the above question yes or N/A? If the answer to this question is “No”, this facility does <u>not</u> qualify for a streamline permit.	<input type="checkbox"/> Yes <input type="checkbox"/> No	-NA-

¹The Air Dispersion Modeling Guidelines contain a section on streamline permitting. The table mentioned above can be found within those guidelines at <http://www.nmenv.state.nm.us/aqb/modeling>.

18-D: Source Category Determination			
1	Is the total potential to emit of each regulated contaminant from all sources at the facility less than 40 tpy?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> • If the answers to this question is “Yes”, the facility qualifies for a 20.2.72.301.D.1 NMAC streamline permit. • Public notice is not required, 20.2.72.303.A NMAC. • Modeling is not required, 20.2.72.301.D NMAC. • If “Yes”, leave the remainder of this table blank.
2	Is the total potential to emit of each regulated contaminant from all emission sources at the facility less than 100 tons per year (tpy) AND the impact on ambient air from all sources at the facility less than the ambient significance levels in 20.2.72.500 NMAC?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> • If the answer to this question is “Yes”, the facility qualifies for a 20.2.72.301.D.2 NMAC streamline permit. • Public notice is not required, 20.2.72.303.A NMAC. • Modeling is required in accordance with 20.2.72.301.D.2 NMAC • If “Yes”, leave the remainder of this table blank.

3.a	Is the total potential to emit of each regulated contaminant from all emission sources at the facility less than 200 tons per year (tpy) AND the maximum modeled ambient impact from the total potential emissions at the facility less than 50 percent of each applicable PSD increment, state and federal ambient air quality standards?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> • If the answers to these questions (3.a, 3.b, 3.c, and 3.d) are all “Yes”, the facility qualifies for a 20.2.72.301.D.3 NMAC streamline permit. • Public notice is required in accordance with NMAC 20.2.72.303 NMAC. • Modeling is required in accordance with 20.2.72.301.D.3 NMAC • If the answers to questions 1, 2, and any of questions in question 3 (3.a, 3.b, 3.c, or 3.d) are “No”, this facility does not qualify for a streamline permit.
3.b	Are there no adjacent sources emitting the same regulated air contaminant(s) as the source within 2.5 km of the modeled nitrogen dioxide (NO2) impact area?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.c	Is the "sum of the potential emissions for oxides of nitrogen from all adjacent sources" (SUM) within 15 km of the NO2 impact area (SUM15) less than 740 tpy?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.d	Is the "sum of the potential emissions for oxides of nitrogen from all adjacent sources" (SUM) within 25 km of the NO2 impact area (SUM25) less than 1540 tpy?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Note: All modeling demonstrations have the option of demonstrating compliance with 20.2.72.301.D.3 NMAC. All public notices are required to comply with the public notice requirements of a NMAC20.2.72.301.D.3 facility.

18-E: Submittals	
1	If a facility is required to submit a modeling analysis to demonstrate compliance with NMAC 20.2.72.300-399, use the Department’s most current version of the Departments Air Dispersion Modeling Guidelines, and include a copy of the modeling in the application. A copy of the most current version of the guidelines can be obtained at the following web address: http://www.nmenv.state.nm.us/aqb/modeling .
2	<p>Public Notice: Per 20.2.72.303.A NMAC, public notice is only required for sources subject to NMAC 20.2.72.301.D.3. Public notice submittals shall consist of the following:</p> <ol style="list-style-type: none"> 1. Proof of Public Notice 2. Include a copy of the certified letter receipts (Field office & Federal Land Managers) (20.2.72.206.A.7, 302.A & 302.12) 3. A copy of the letters sent to the appropriate federal land manager if the source will locate within 50 km of a boundary of a Class I area (302.A.2) 4. A statement stating a complete copy of the application and public notice has been provided to the Departments field or district office nearest the source (302.A.1) 5. The location where the public notice has been posted on the site (303.B.2) 6. A copy of the classified or legal ad and its affidavit of publication (303.B.1)

Section 19

Requirements for Title V Program

Do not print this section unless this is a Title V application.

Who Must Use this Attachment:

- * Any major source as defined in 20.2.70 NMAC.
 - * Any source, including an area source, subject to a standard or other requirement promulgated under Section 111 - Standards of Performance for New Stationary Sources, or Section 112 Hazardous Air Pollutants, of the 1990 federal Clean Air Act ("federal Act"). Non-major sources subject to Sections 111 or 112 of the federal Act are exempt from the obligation to obtain an 20.2.70 NMAC operating permit until such time that the EPA Administrator completes rulemakings that require such sources to obtain operating permits. In addition, sources that would be required to obtain an operating permit solely because they are subject to regulations or requirements under Section 112(r) of the federal Act are exempt from the requirement to obtain an Operating Permit.
 - * Any Acid Rain source as defined under title IV of the federal Act. The Acid Rain program has additional forms. See <http://www.nmenv.state.nm.us/aqb/index.html>. Sources that are subject to both the Title V and Acid Rain regulations are encouraged to submit both applications simultaneously.
 - * Any source in a source category designated by the EPA Administrator ("Administrator"), in whole or in part, by regulation, after notice and comment.
-

19.1 - 40 CFR 64, Compliance Assurance Monitoring (CAM) (20.2.70.300.D.10.e NMAC)

Any source subject to 40CFR, Part 64 (Compliance Assurance Monitoring) must submit all the information required by section 64.7 with the operating permit application. The applicant must prepare a separate section of the application package for this purpose; if the information is already listed elsewhere in the application package, make reference to that location. Facilities not subject to Part 64 are invited to submit periodic monitoring protocols with the application to help the AQB to comply with 20.2.70 NMAC. Sources subject to 40 CFR Part 64, must submit a statement indicating your source's compliance status with any enhanced monitoring and compliance certification requirements of the federal Act.

CAM plans will be required for RCTOs at time of renewal of the Title V permit.

19.2 - Compliance Status (20.2.70.300.D.10.a & 10.b NMAC)

Describe the facility's compliance status with each applicable requirement at the time this permit application is submitted. This statement should include descriptions of or references to all methods used for determining compliance. This statement should include descriptions of monitoring, recordkeeping and reporting requirements and test methods used to determine compliance with all applicable requirements. Refer to Section 2, Tables 2-N and 2-O of the Application Form as necessary. (20.2.70.300.D.11 NMAC) For facilities with existing Title V permits, refer to most recent Compliance Certification for existing requirements. Address new requirements such as CAM, here, including steps being taken to achieve compliance.

I hereby certify that Intel is in compliance with all of the applicable requirements identified in this application. This certification is based on a review of the monitoring, recordkeeping and enforcement requirements in NSR Permit No. 325-M11R2, and the modeling submitted with the NSR permit applications

19.3 - Continued Compliance (20.2.70.300.D.10.c NMAC)

Provide a statement that your facility will continue to be in compliance with requirements for which it is in compliance at the time of permit application. This statement must also include a commitment to comply with other applicable requirements as they come into effect during the permit term. This compliance must occur in a timely manner or be consistent with such schedule expressly required by the applicable requirement.

Intel will continue to be in compliance with requirements for which it is in compliance at the time of permit application. Intel also commits to comply with other applicable requirements as they come into effect during the permit term. Compliance will occur in a timely manner or be consistent with such schedule expressly required by the applicable requirement.

19.4 - Schedule for Submission of Compliance (20.2.70.300.D.10.d NMAC)

You must provide a proposed schedule for submission to the department of compliance certifications during the permit term. This certification must be submitted annually unless the applicable requirement or the department specifies a more frequent period. A sample form for these certifications will be attached to the permit.

Intel proposes to submit compliance certifications annually within 30 days after the end of the specified reporting period in accordance with 20.2.70.302.E.3 NMAC. The specific schedule of submission of certifications will be determined with the Title V permit.

19.5 - Stratospheric Ozone and Climate Protection

In addition to completing the four (4) questions below, you must submit a statement indicating your source's compliance status with requirements of Title VI, Section 608 (National Recycling and Emissions Reduction Program) and Section 609 (Servicing of Motor Vehicle Air Conditioners).

-
1. Does your facility have any air conditioners or refrigeration equipment that uses CFCs, HCFCs or other ozone-depleting substances? **Yes** **No**
 2. Does any air conditioner(s) or any piece(s) of refrigeration equipment contain a refrigeration charge greater than 50 lbs? **Yes** **No**
(If the answer is yes, describe the type of equipment and how many units are at the facility.)
 3. Do your facility personnel maintain, service, repair, or dispose of any motor vehicle air conditioners (MVACs) or appliances ("appliance" and "MVAC" as defined at 82. 152)? **Yes** **No**
 4. Cite and describe which Title VI requirements are applicable to your facility (i.e. 40 CFR Part 82, Subpart A through G.)

2. As defined by the regulations Intel has the following types of equipment that contain a refrigeration charge greater than 50 lbs:

Comfort cooling – 21 units
Industrial Process – 51 units
Other Refrigeration – 31 units

4. Subpart F & Subpart G

19.6 - Compliance Plan and Schedule

Applications for sources, which are not in compliance with all applicable requirements at the time the permit application is submitted to the department, must include a proposed compliance plan as part of the permit application package. This plan shall include the information requested below:

A. Description of Compliance Status: (20.2.70.300.D.11.a NMAC)

A narrative description of your facility's compliance status with respect to all applicable requirements (as defined in 20.2.70 NMAC) at the time this permit application is submitted to the department.

B. Compliance plan: (20.2.70.300.D.11.B NMAC)

A narrative description of the means by which your facility will achieve compliance with applicable requirements with which it is not in compliance at the time you submit your permit application package.

C. Compliance schedule: (20.2.70.300D.11.c NMAC)

A schedule of remedial measures that you plan to take, including an enforceable sequence of actions with milestones, which will lead to compliance with all applicable requirements for your source. This schedule of compliance must be at least as stringent as that contained in any consent decree or administrative order to which your source is subject. The obligations of any consent decree or administrative order are not in any way diminished by the schedule of compliance.

D. Schedule of Certified Progress Reports: (20.2.70.300.D.11.d NMAC)

A proposed schedule for submission to the department of certified progress reports must also be included in the compliance schedule. The proposed schedule must call for these reports to be submitted at least every six (6) months.

E. Acid Rain Sources: (20.2.70.300.D.11.e NMAC)

If your source is an acid rain source as defined by EPA, the following applies to you. For the portion of your acid rain source subject to the acid rain provisions of title IV of the federal Act, the compliance plan must also include any additional requirements under the acid rain provisions of title IV of the federal Act. Some requirements of title IV regarding the schedule and methods the source will use to achieve compliance with the acid rain emissions limitations may supersede the requirements of title V and 20.2.70 NMAC. You will need to consult with the Air Quality Bureau permitting staff concerning how to properly meet this requirement.

NOTE: The Acid Rain program has additional forms. See <http://www.nmenv.state.nm.us/aqb/index.html>. Sources that are subject to both the Title V and Acid Rain regulations are **encouraged** to submit both applications **simultaneously**.

Not applicable; the facility is in compliance with all applicable requirements.

19.7 - 112(r) Risk Management Plan (RMP)

Any major sources subject to section 112(r) of the Clean Air Act must list all substances that cause the source to be subject to section 112(r) in the application. The permittee must state when the RMP was submitted to and approved by EPA.

This requirement currently does not apply.

19.8 - Distance to Other States, Bernalillo, Indian Tribes and Pueblos

Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B NMAC)?

Laguna Indian reservation – 29.3 km
Canoncito Navajo Indian Reservation – 32 km

Isleta Indian Reservation – 29.8km
Sandia Pueblo 4.6 km
San Felipe Pueblo – 20.2 km
Zia Indian Reservation – 18.6 km
Santa Ana Pueblo – 14.4 km
Santo Domingo Pueblo - 36.7 km
Cochiti Pueblo – 46.3 km
Jemez Indian Reservation – 38 km
Navajo Indian Reservation – 77.2 km
Bernalillo county 0.03 km

19.9 - Responsible Official

Provide the Responsible Official as defined in 20.2.70.7.AD NMAC: Brian A. Rashap, Corporate Services Manager. Mr. Rashap is a duly authorized representative of Ann Kelleher, who is a vice president of a principal business function at Intel.



April 11, 2012

Richard Goodyear, Acting Bureau Chief
New Mexico Environment Department
Air Quality Bureau
1301 Siler Road, Bldg. B
Santa Fe, NM 87507

RE: DELEGATION OF RESPONSIBLE CORPORATE OFFICIAL SIGNATURE AUTHORITY

Mr. Goodyear,

Under the operating permit regulations, 20.2.70.300 E NMAC, any document submitted to the Department under those regulations must contain a certification by a responsible official. Under 20.2.70.7 AE(1) NMAC, for a corporation, a "responsible official" means "a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

- a) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
- b) the delegation of authority to such representative is approved in advance by the department.

In my capacity as Vice President, Technology and Manufacturing Group and Co-General Manager, Fab/Sort Manufacturing, I am a responsible official under 20.2.70.7 AE(1) NMAC. I hereby authorize Brian Rashap, the New Mexico Corporate Services Manager, to act as the responsible official for Intel Corporation's New Mexico site located at 4100 Sara Road in Rio Rancho, New Mexico and sign all air quality applications, reports, and other documents as my duly authorized representative. Brian Rashap is responsible for the overall operation of one or more manufacturing, production, or operating facilities at the New Mexico site and those facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars).

Sincerely,

A handwritten signature in blue ink that reads "Ann B. Kelleher".

Ann Kelleher
Vice President, Technology and Manufacturing Group and Co-General Manager, Fab/Sort Manufacturing

ENS027

Section 20

Other Relevant Information

Other relevant information. Use this attachment to clarify any part in the application that you think needs explaining. Reference the section, table, column, and/or field. Include any additional text, tables, calculations or clarifying information.

Additionally, the applicant may propose specific permit language for AQB consideration. In the case of a revision to an existing permit, the applicant should provide the old language and the new language in track changes format to highlight the proposed changes. If proposing language for a new facility or language for a new unit, submit the proposed operating condition(s), along with the associated monitoring, recordkeeping, and reporting conditions. In either case, please limit the proposed language to the affected portion of the permit.

Details on Sections that are Not Applicable to this permit revision

The following Sections of the application are not applicable to this permit revision. Specific reasons are cited below following the Section titles.

Table 2-N: CEM

- There are no state or federal regulations that require CEMs on any equipment and therefore no information is required in this table.

Table 2-O: Parametric Emissions Measurement Equipment

- There are no parametric emissions measurement equipment requirements and therefore no information is required in this table

Section 9: Public Notice

- The Intel facility is not subject to public notice for this permit application and therefore no information is required in this section.

Section 12: Special Requirements for a PSD Application

- The Intel facility is not subject to PSD and therefore no information is required in this section.

Section 15: Alternative Operating Scenarios

- There are no alternative operating scenarios for the Intel facility and therefore no information is required in this section.

Section 16: Modeling

- The Intel facility is not subject to ambient air quality modeling for this application and therefore no information is required in this section.

Section 18: Addendum for Streamline Applications (streamline applications only)

- This application is not being submitted as a streamlined application and therefore no information is required in this section.

Section 21: Addendum for Landfill Applications

- This permit application is not for a landfill and therefore no information is required in this section.

Section 6 and Section 7 Information by Equipment Type

Thermal Oxidizers

Section 6 Information

Table 2-F: Additional Emissions during Startup, Shutdown, and Routine Maintenance (SSM)

Emission from the thermal oxidizers during SSM will not require an increase in the Requested Allowable Emissions listed in Table 2G. When an oxidizer is shutdown for any reason, including routine maintenance, there are no combustion emissions, or emissions from burning natural gas during this time. Emissions of VOCs are increased during this time but will remain below the PSEL as annual downtime of all thermal oxidizers has historically been very low and now all units have redundancy which further reduces the downtime. The thermal oxidizers take approximately 30-45 minutes to get up to the required operating temperature and therefore emissions during start up will also remain below the levels listed in Table 2G.

Table 2-G: Stack Exit and Fugitive Emission Rates for Special Stacks

Hourly Emission Limits

The hourly rates listed for NO_x, CO, SO₂, TSP and PM₁₀ are the same rates that are currently permitted for the existing Munters thermal oxidizers and these are the same emission rates that have been in the permit for the previous Durr thermal oxidizers since the permit was issued for that equipment in Air Quality Permit #325-M7. Intel is not requesting a change to these emission rates.

Annual Emission Limits

Condition 2.B.i of Air Quality Permit #0325-M11R2 states the plant site emission limits (PSELs) for NO_x and CO. Intel is not requesting a modification to the PSELs. The PSEL for NO_x is 95.7 tons and the PSEL for CO is 94.7 tons.

Condition 2.B.ii of Air Quality Permit #0325-M11R2 states the PSEL for TSP/PM₁₀ from the thermal oxidizers. Intel is not requesting a modification to the PSELs. The PSEL for TSP/PM₁₀ from the thermal oxidizers is 14.2 tons.

Condition 4.B. of Air Quality Permit #0325-M11R2 states the PSEL for VOCs. Intel is not requesting a modification to the PSELs. The PSEL for VOCs is 96.5 tons.

Section 7 Information

Information to Support Table 2-C Emissions Control Equipment and Table 2-G Stack Exit and Fugitive Emission Rates for Special Stacks

The attached sheets are performance testing for all Munters units that are currently installed.

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Table 1
 Munters Unit 1 (VOC138-1-120)

Mode	Start	Stop	TO FID VOC Conc. (ppm as C ₂ H ₆)	Rotor FID VOC Conc. (ppm as C ₂ H ₆)	Inlet FID VOC Conc. (ppm as C ₂ H ₆)	TO Exhaust Emissions (lbs/hr)	Rotor Exhaust Emissions (lbs/hr)	Combined Emissions (lbs/hr)	Inlet Loading (lbs/hr)	Efficiency (%)
Mode 1	02/17/09 16:00	02/17/09 17:00	0.00	0.67	13.16	0.00	0.11	0.11	1.95	94.13%
Mode 1	02/17/09 17:00	02/18/09 08:00	0.00	0.63	14.59	0.00	0.09	0.09	2.16	95.61%
Mode 3	02/18/09 16:15	02/18/09 18:00	0.00	0.59	15.29	0.00	0.04	0.04	1.12	96.32%

VOC Results – with Subtraction of Methane Concentration into and out of the Rotor

Mode	Start	Stop	TO FID VOC Conc. (ppm as C ₂ H ₆)	Rotor FID VOC Conc. (ppm as C ₂ H ₆)	Inlet FID VOC Conc. (ppm as C ₂ H ₆)	TO Exhaust Emissions (lbs/hr)	Rotor Exhaust Emissions (lbs/hr)	Combined Emissions (lbs/hr)	Inlet Loading (lbs/hr)	Efficiency (%)
Mode 1	02/17/09 16:00	02/17/09 17:00	0.00	0.08	12.56	0.00	0.013	0.013	1.86	99.31%
Mode 1	02/17/09 17:00	02/18/09 08:00	0.00	0.03	13.99	0.00	0.005	0.005	2.07	99.77%
Mode 3	02/18/09 16:15	02/18/09 18:00	0.00	0.00	14.69	0.00	0.000	0.000	1.08	100.00%

TO Exhaust NO_x/CO Results

Mode	Start	Stop	NO _x (ppm)	NO _x (lbs/hr)	CO (ppm)	CO (lbs/hr)
Mode 1	02/17/09 16:00	02/17/09 17:00	10.28	0.10	7.45	0.05
Mode 1	02/17/09 17:00	02/18/09 08:00	10.09	0.09	7.94	0.05
Mode 3	02/18/09 16:15	02/18/09 18:00	8.50	0.04	0.40	0.00

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Table 2
 Munters Unit 2 (VOC138-2-120)

Mode	Start	Stop	TO FID VOC Conc. (ppm as C ₃ H ₈)	Rotor FID VOC Conc. (ppm as C ₃ H ₈)	Inlet FID VOC Conc. (ppm as C ₃ H ₈)	TO Exhaust Emissions (lbs/hr)	Rotor Exhaust Emissions (lbs/hr)	Combined Emissions (lbs/hr)	Inlet Loading (lbs/hr)	Efficiency (%)
Mode 1	02/18/09 11:30	02/18/09 13:00	0.38	0.24	11.04	0.0036	0.04	0.04	1.57	97.52%
Mode 3	02/18/09 16:15	02/18/09 18:00	0.00	0.31	15.29	0.0000	0.02	0.02	1.13	98.07%

VOC Results – with Subtraction of Methane Concentration into and out of the Rotor

Mode	Start	Stop	TO FID VOC Conc. (ppm as C ₃ H ₈)	Rotor FID VOC Conc. (ppm as C ₃ H ₈)	Inlet FID VOC Conc. (ppm as C ₃ H ₈)	TO Exhaust Emissions (lbs/hr)	Rotor Exhaust Emissions (lbs/hr)	Combined Emissions (lbs/hr)	Inlet Loading (lbs/hr)	Efficiency (%)
Mode 1	02/18/09 11:30	02/18/09 13:00	0.38	0.00	10.44	0.00	0.000	0.004	1.48	99.76%
Mode 3	02/18/09 16:15	02/18/09 18:00	0.00	0.00	14.69	0.00	0.000	0.000	1.09	100.00%

TO Exhaust NO_x/CO Results

Mode	Start	Stop	NO _x (ppm)	NO _x (lbs/hr)	CO (ppm)	CO (lbs/hr)
Mode 1	02/18/09 11:30	02/18/09 13:00	9.05	0.09	5.34	0.03
Mode 3	02/18/09 16:15	02/18/09 18:00	8.55	0.04	0.59	0.00

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Table 2
 Munters Unit 3 (VOC138-3-120) Detailed Test Results

Mode	Start	Stop	TO FID VOC Conc. (ppm as C ₂ H ₆)	Rotor FID VOC Conc. (ppm as C ₂ H ₆)	Inlet FID VOC Conc. (ppm as C ₂ H ₆)	TO Exhaust Emissions (lbs/hr)	Rotor Exhaust Emissions (lbs/hr)	Combined Emissions (lbs/hr)	Inlet Loading (lbs/hr)	Efficiency (%)
Mode 1	01/13/10 08:00	01/13/10 09:00	0.25	1.12	24.05	0.0026	0.105	0.108	2.31	95.34%
Mode 2	01/13/10 10:00	01/13/10 11:00	0.09	1.01	32.59	0.0009	0.063	0.064	1.96	96.75%
Mode 3	01/13/10 11:25	01/13/10 12:25	0.00	1.04	40.12	0.0000	0.063	0.063	2.46	97.42%

VOC Results –with Subtraction of Methane Concentration into and out of the Rotor

Mode	Start	Stop	TO FID VOC Conc. (ppm as C ₂ H ₆)	Rotor FID VOC Conc. (ppm as C ₂ H ₆)	Inlet FID VOC Conc. (ppm as C ₂ H ₆)	TO Exhaust Emissions (lbs/hr)	Rotor Exhaust Emissions (lbs/hr)	Combined Emissions (lbs/hr)	Inlet Loading (lbs/hr)	Efficiency (%)
Mode 1	01/13/10 08:00	01/13/10 09:00	0.25	0.49	23.50	0.0026	0.046	0.048	2.25	97.85%
Mode 2	01/13/10 10:00	01/13/10 11:00	0.09	0.40	32.04	0.0009	0.025	0.026	1.93	98.66%
Mode 3	01/13/10 11:25	01/13/10 12:25	0.00	0.44	39.57	0.0000	0.027	0.027	2.42	98.90%

TO Exhaust NO_x/CO Results

Mode	Start	Stop	NO _x (ppm)	NO _x (lbs/hr)	CO (ppm)	CO (lbs/hr)
Mode 1	01/13/10 08:00	01/13/10 09:00	8.29	0.09	6.35	0.04
Mode 2	01/13/10 10:00	01/13/10 11:00	8.19	0.08	2.45	0.01
Mode 3	01/13/10 11:25	01/13/10 12:25	7.81	0.05	2.16	0.01

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Table 2
 F11F VOC138-1-120 Detailed Test Results

Mode	Start	Stop	TO FID VOC Conc. (ppm as C ₃ H ₈)	Rotor FID (ppm as C ₃ H ₈)		Inlet FID (ppm as C ₃ H ₈)		TO Exhaust Emissions (lbs/hr)	Rotor Exhaust Emissions (lbs/hr)	Combined Emissions (lbs/hr)	Inlet Loading (lbs/hr)	Efficiency (%)
				VOC Conc.	CH ₄	VOC Conc.	CH ₄					
Mode 1	08/17/11 11:00	08/17/11 12:00	0.00	0.67	1.76	22.82	1.77	0.0000	0.078	0.078	2.79	97.22%
Mode 2	08/17/11 18:38	08/17/11 19:38	0.00	0.60	1.76	22.97	1.77	0.0000	0.033	0.033	1.60	97.90%
Mode 3	08/18/11 10:20	08/18/11 11:20	0.00	0.42	1.76	23.87	1.77	0.0000	0.025	0.025	1.66	98.50%

VOC Results – with Subtraction of Methane Concentration into and out of the Rotor

Mode	Start	Stop	TO FID VOC Conc. (ppm as C ₃ H ₈)	Rotor FID VOC Conc. (ppm as C ₃ H ₈)	Inlet FID VOC Conc. (ppm as C ₃ H ₈)	TO Exhaust Emissions (lbs/hr)	Rotor Exhaust Emissions (lbs/hr)	Combined Emissions (lbs/hr)	Inlet Loading (lbs/hr)	Efficiency (%)
Mode 1	08/17/11 11:00	08/17/11 12:00	0.00	0.01	22.15	0.0000	0.001	0.001	2.71	99.97%
Mode 2	08/17/11 18:38	08/17/11 19:38	0.00	0.00	22.30	0.0000	0.000	0.000	1.55	100.00%
Mode 3	08/18/11 10:20	08/18/11 11:20	0.00	0.00	23.20	0.0000	0.000	0.000	1.61	100.00%

TO Exhaust NO_x/CO Results

Mode	Start	Stop	NO _x (ppm)	NO _x (lbs/hr)	CO (ppm)	CO (lbs/hr)
Mode 1	08/17/11 11:00	08/17/11 12:00	10.70	0.11	32.21	0.20
Mode 2	08/17/11 18:38	08/17/11 19:38	8.61	0.08	26.83	0.15
Mode 3	08/18/11 10:20	08/18/11 11:20	7.56	0.04	3.61	0.01

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Table 2 continued
F11F VOC138-2-120 Detailed Test Results

Mode	Start	Stop	TO FID VOC Conc. (ppm as C ₃ H ₈)	Rotor FID (ppm as C ₃ H ₈)		Inlet FID (ppm as C ₃ H ₈)		TO Exhaust Emissions (lbs/hr)	Rotor Exhaust Emissions (lbs/hr)	Combined Emissions (lbs/hr)	Inlet Loading (lbs/hr)	Efficiency (%)
				VOC Conc.	CH ₄	VOC Conc.	CH ₄					
Mode 1	08/18/11 13:50	08/18/11 14:50	0.33	0.56	1.86	25.43	1.77	0.0034	0.078	0.082	4.21	98.06%
Mode 2	08/17/11 18:38	08/17/11 19:38	0.18	0.93	1.86	23.21	1.77	0.0014	0.053	0.054	1.67	96.73%
Mode 3	08/18/11 10:20	08/18/11 11:20	0.22	0.91	1.86	24.61	1.77	0.0013	0.048	0.050	1.77	97.18%

VOC Results – with Subtraction of Methane Concentration into and out of the Rotor

Mode	Start	Stop	TO FID VOC Conc. (ppm as C ₃ H ₈)	Rotor FID (ppm as C ₃ H ₈)		Inlet FID VOC Conc. (ppm as C ₃ H ₈)	TO Exhaust Emissions (lbs/hr)	Rotor Exhaust Emissions (lbs/hr)	Combined Emissions (lbs/hr)	Inlet Loading (lbs/hr)	Efficiency (%)
				VOC Conc.	CH ₄						
Mode 1	08/18/11 13:50	08/18/11 14:50	0.33	0.00	24.75	0.0034	0.000	0.003	4.10	99.92%	
Mode 2	08/17/11 18:38	08/17/11 19:38	0.18	0.23	22.54	0.0014	0.013	0.014	1.62	99.11%	
Mode 3	08/18/11 10:20	08/18/11 11:20	0.22	0.20	23.94	0.0013	0.011	0.012	1.72	99.30%	

TO Exhaust NO_x/CO Results

Mode	Start	Stop	NO _x (ppm)	NO _x (lbs/hr)	CO (ppm)	CO (lbs/hr)
Mode 1	08/18/11 13:50	08/18/11 14:50	9.63	0.10	27.66	0.18
Mode 2	08/17/11 18:38	08/17/11 19:38	7.67	0.06	13.50	0.07
Mode 3	08/18/11 10:20	08/18/11 11:20	3.93	0.02	2.02	0.01

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Table 2 continued
F11B VOC138-1-120 Detailed Test Results

Mode	Start	Stop	TO FID VOC Conc. (ppm as C ₃ H ₈)	Rotor FID (ppm as C ₃ H ₈)		Inlet FID (ppm as C ₃ H ₈)		TO Exhaust Emissions (lbs/hr)	Rotor Exhaust Emissions (lbs/hr)	Combined Emissions (lbs/hr)	Inlet Loading (lbs/hr)	Efficiency (%)
				VOC Conc.	CH ₄	VOC Conc.	CH ₄					
Mode 1	09/07/11 09:40	09/07/11 10:40	0.00	0.84	1.82	49.96	1.84	0.0000	0.096	0.096	6.13	98.43%
Mode 2	09/07/11 18:15	09/07/11 19:15	0.00	0.80	1.77	50.19	1.77	0.0000	0.045	0.045	3.22	98.61%
Mode 3	09/08/11 13:45	09/08/11 14:45	0.00	0.41	1.92	43.51	1.92	0.0000	0.022	0.022	2.61	99.14%

VOC Results – with Subtraction of Methane Concentration into and out of the Rotor

Mode	Start	Stop	TO FID VOC Conc. (ppm as C ₃ H ₈)	Rotor FID VOC Conc. (ppm as C ₃ H ₈)		Inlet FID VOC Conc. (ppm as C ₃ H ₈)	TO Exhaust Emissions (lbs/hr)	Rotor Exhaust Emissions (lbs/hr)	Combined Emissions (lbs/hr)	Inlet Loading (lbs/hr)	Efficiency (%)
				VOC Conc.	CH ₄						
Mode 1	09/07/11 09:40	09/07/11 10:40	0.00	0.15		49.26	0.0000	0.017	0.017	6.05	99.72%
Mode 2	09/07/11 18:15	09/07/11 19:15	0.00	0.13		49.51	0.0000	0.007	0.007	3.18	99.77%
Mode 3	09/08/11 13:45	09/08/11 14:45	0.00	0.00		42.78	0.0000	0.000	0.000	2.57	100.00%

TO Exhaust NO_x/CO Results

Mode	Start	Stop	NO _x (ppm)	NO _x (lbs/hr)	CO (ppm)	CO (lbs/hr)
Mode 1	09/07/11 09:40	09/07/11 10:40	17.22	0.17	13.19	0.08
Mode 2	09/07/11 18:15	09/07/11 19:15	16.35	0.14	5.90	0.03
Mode 3	09/08/11 13:45	09/08/11 14:45	18.29	0.12	2.46	0.01

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Table 2 continued
F11B VOC138-2-120 Detailed Test Results

Mode	Start	Stop	TO FID VOC Conc. (ppm as C ₃ H ₈)	Rotor FID (ppm as C ₃ H ₈)		Inlet FID (ppm as C ₃ H ₈)		TO Exhaust Emissions (lbs/hr)	Rotor Exhaust Emissions (lbs/hr)	Combined Emissions (lbs/hr)	Inlet Loading (lbs/hr)	Efficiency (%)
				VOC Conc.	CH ₄	VOC Conc.	CH ₄					
Mode 1	09/07/11 14:30	09/07/11 15:51	0.48	0.90	1.68	51.07	1.79	0.0047	0.101	0.106	6.26	98.31%
Mode 2	09/07/11 18:15	09/07/11 19:15	0.63	0.88	1.77	49.69	1.77	0.0055	0.050	0.055	3.10	98.22%
Mode 3	09/08/11 13:45	09/08/11 14:45	0.00	0.41	1.92	42.81	1.92	0.0000	0.022	0.022	2.62	99.14%

VOC Results – with Subtraction of Methane Concentration into and out of the Rotor

Mode	Start	Stop	TO FID VOC Conc. (ppm as C ₃ H ₈)	Rotor FID (ppm as C ₃ H ₈)		Inlet FID VOC Conc. (ppm as C ₃ H ₈)	TO Exhaust Emissions (lbs/hr)	Rotor Exhaust Emissions (lbs/hr)	Combined Emissions (lbs/hr)	Inlet Loading (lbs/hr)	Efficiency (%)
				VOC Conc.	CH ₄						
Mode 1	09/07/11 14:30	09/07/11 15:51	0.48	0.26	0.26	50.39	0.0047	0.029	0.034	6.17	99.45%
Mode 2	09/07/11 18:15	09/07/11 19:15	0.63	0.20	0.20	49.02	0.0055	0.011	0.017	3.06	99.44%
Mode 3	09/08/11 13:45	09/08/11 14:45	0.00	0.00	0.00	42.08	0.0000	0.000	0.000	2.58	100.00%

TO Exhaust NO_x/CO Results

Mode	Start	Stop	NO _x		CO	
			NO _x (ppm)	NO _x (lbs/hr)	CO (ppm)	CO (lbs/hr)
Mode 1	09/07/11 14:30	09/07/11 15:51	13.95	0.14	15.53	0.10
Mode 2	09/07/11 18:15	09/07/11 19:15	10.34	0.09	7.15	0.04
Mode 3	09/08/11 13:45	09/08/11 14:45	8.78	0.06	2.92	0.01

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Attached is also the burner specification sheet from the burner manufacturer.

Data 111-6

7/7/06



Winnox Burners

Model WX0200

Version 1

Main Specifications

PARAMETER		SPECIFICATIONS	
Blower Type		Packaged blower	Remote blower
Maximum input, BTU/hr (kW) Note: Capacities given without air filter. Contact factory for chamber pressures outside the given range, or varying chamber pressure conditions.	Chamber pressure "WC (mbar)	Nominal (60 Hz)	Pressure at air inlet 1 psig (70 mbar)
	-5.0 (-12.5)	2,275,000 (667)	2,610,000 (765)
	-3.0 (-7.5)	2,170,000 (634)	2,525,000 (740)
	0.0	2,000,000 (586)	2,400,000 (703)
	1.0 (2.5)	1,940,000 (568)	2,355,000 (690)
	2.0 (5.0)	1,880,000 (551)	2,310,000 (677)
Minimum input, BTU/hr (kW)		150,000 (39)	
Fuel inlet pressure at ratio regulator, "w.c. (mbar) ¹⁾	Maximum	40.0 (100)	40.0 (100)
	Minimum	23.0 (58)	30.0 (75)
Maximum chamber temperature, °F (°C) <i>Note: Tube and plug temperatures should be reduced 150°F when using propane or butane.</i>		Standard combustion tube: 1300 (704) High temp. combustion tube: 1550 (843) Refractory Plug: 1800 (982)	
Flame Length	Alloy Tube	Flame is inside tube at all inputs	
Excess Air, % at high fire		40%	
Piping		N.P.T. or B.S.P. burner piping available	
Flame detection		Flame Rod or U.V. Scanner	
Fuels		Natural gas ²⁾ For any other mixed gas, contact Eclipse Combustion	
Blower Motor Power, hp		3.0	
Weight, lbs (kg)	Alloy Tube	262 (119)	180 (82)
	Refractory Plug	235 (106)	153 (70)

1) For proper performance, this pressure must be kept constant across the burner operating range.
2) See Design Guide for more information about typical fuel composition and properties.

- All information is based on laboratory testing. Different chamber size and conditions will affect data.
- Maximum inputs for packaged blower versions are given for the standard combustion air blower without an inlet air filter.
- All inputs are based on gross calorific values and standard conditions: one atmosphere, 70° F (21° C)
- Eclipse reserves the right to change the construction and/or configuration of our products at any time without being obliged to adjust earlier supplies accordingly.



Ammonia Treatment System

Table 2-F: Additional Emissions during Startup, Shutdown, and Routine Maintenance (SSM)

Emission from the ammonia treatment system will not require an increase in the Requested Allowable Emissions listed in Table 2G. When the ammonia treatment system is shutdown for any reason, including routine maintenance, there are no combustion emissions, or emissions from burning natural gas during this time. There will be no other air emissions any time the system is not operating as this system is designed to remove ammonia from a wastewater stream.

Table 2-G: Stack Exit and Fugitive Emission Rates for Special Stacks

Hourly Emission Limits

The hourly rates listed for NO_x, CO, SO₂, TSP and PM₁₀ are the same rates that are currently permitted for the existing Ammonia Treatment System. Intel is not requesting a change to these emission rates for the additional ammonia treatment systems.

Annual Emission Limits

Condition 2.B.i of Air Quality Permit #0325-M11R2 states the plant site emission limits (PSELs) for NO_x and CO. Intel is not requesting a modification to the PSELs. The PSEL for NO_x is 95.7 tons and the PSEL for CO is 94.7 tons.

Condition 4.B. of Air Quality Permit #0325-M11R2 states the PSEL for VOCs. Intel is not requesting a modification to the PSELs. The PSEL for VOCs is 96.5 tons.

Section 7 Information

Information to Support Table 2-C Emissions Control Equipment and Table 2-G Stack Exit and Fugitive Emission Rates for Special Stacks

The following is the performance testing data for the ammonia treatment system as well as the manufacturer's information on the catalyst.

Table 2
Trimix – Unit ID OX293-0-70s
Detailed Test Results

Run No.	Oxides of Nitrogen (NO _x)		Carbon Monoxide (CO)		Ammonia (NH ₃)		Flow Rate dscfm
	ppm _{dry}	Lbs/hr	ppm _{dry}	Lbs/hr	ppm _{dry}	Lbs/hr	
1	3.60	0.14	0.01	0.0002	0.07	0.001	5,330.9
2	4.91	0.19	0.11	0.003	0.06	0.001	5,274.1
3	5.49	0.21	0.11	0.003	0.11	0.002	5,259.3
Average	4.67	0.18	0.08	0.002	0.08	0.001	5,288.1

Table 3 - Testing Chronology
Trimix – Unit ID OX293-0-70s

Run No.	Start (Date/Time)	End (Date/Time)
1	08/12/11 09:15	8/12/11 10:15
2	08/12/11 10:35	8/12/11 11:35
3	08/12/11 11:51	8/12/11 12:51

CATALYTIC PRODUCTS
INTERNATIONAL

METAC® CATALYST PRODUCTS



Catalytic Products International, Inc. designs and manufactures custom catalyst and catalyst retrofit systems for VOC, CO, and NOx from a variety of industrial and generating industries. Our unique monolith structures create low back pressure and offer high geometric surface areas, both necessary for high performance and low operating costs.

The modular designs offered in the METAC Catalyst Products Group allow CPI to customize the size and configuration of the catalyst for the specific needs of your application. Not every application is identical. Pressure requirements, particulate size, solvent types, concentrations, performance requirements, installation requirements all come into design consideration. CPI offers over 100 different catalyst options to match the specific needs of your application.

The right chemistry forms the building blocks for an efficient catalyst. At CPI, our engineers have developed and refined our METAC Catalyst Products to offer a highly dispersed, finely divided precious metal particle distribution over customized structures offering enormous surface areas. The combined efforts of particle distribution and maximized surface area afford low operating temperatures, thermally stable operations, and long life.

Catalytic Products International, Inc. is a 40 year old manufacture of catalyst products, fume oxidation systems, heat recovery systems, energy conservation, maintenance and repair service, engineering service. A partial list of METAC Catalyst Products users include; nuclear power generation, turbine and boiler emission control, metal decorating, printing, food processing, semiconductor, chemical processing, petrochemical processing, gen-set emission control, among many others...

Please contact us for more information about our expertise in
cost effective abatement of VOC, CO, and NOx

Catalysts, Thermal Oxidizers, Regenerative Thermal Oxidizer's, Catalytic Oxidizer's, Heat Recovery System's, Energy Conservation, Repair and Retrofit Services, Maintenance Services, Engineering

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e-mail: info@cpilink.com

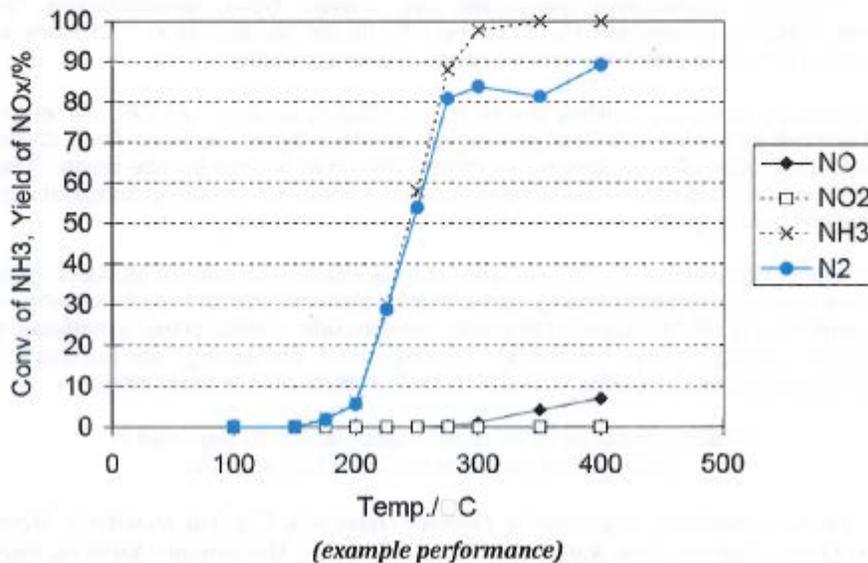
tel: 847-438-0334 fax: 847-438-0944
website: www.cpilink.com

CATALYTIC PRODUCTS
INTERNATIONAL
AMMONIA REMOVAL CATALYST

Typical Chemical and Physical Properties

Catalyst Name	Ammonia Removal Catalyst Envicat 2060
Catalyst Form	230 cpsi Ceramic Honeycomb Monolith Unit Blocks: 5.91" x 5.91" x 3" 12 unit blocks per module
Description	Catalyst used for CO, VOC, and selective NH ₃ reduction. Cordierite ceramic monolith substrate with V ₂ O ₅ and Alumina wash coat and Platinum Group Metals
Containment	304 stainless steel housing with removable lid. Ceramic blanket surrounding the unit blocks. Module: 12-1/2 x 12-1/2 x 9-1/2
Physical Properties	Washcoat surface area: > 80 m ² /g Bulk Density: 36 lbs/ft ³ Module Weight: 30 lbs
Application	Design Maximum Air Volume: 7,500 scfm Design Temperature: 450 – 650 F Ideal Temperature: 570 F (estimate) Volume Installed: 22.5 cf Space Velocity Installed: 20,000 hr ⁻¹ Number of Modules Installed: 30

Fig. Oxidation of NH₃ over Precious Metal Catalyst (honeycomb)
SV=20000h-1, NH₃(5000ppm), Air balance, H₂O(5%)



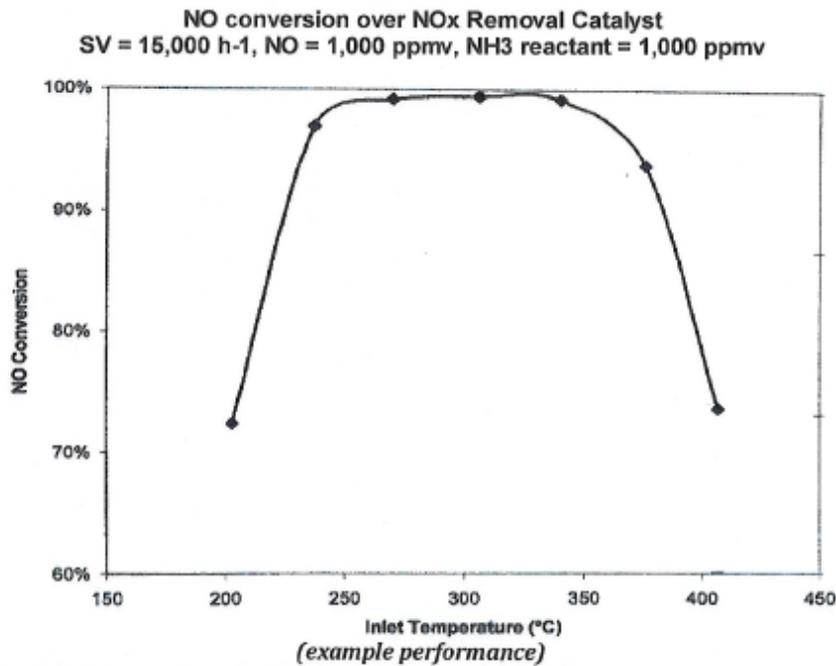
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NOX REMOVAL CATALYST

Typical Chemical and Physical Properties

Catalyst Name	NOx Removal Catalyst Envicat SCR
Catalyst Form	230 cpsi Ceramic Honeycomb Monolith Unit Blocks: 5.91" x 5.91" x 3" 16 unit blocks per module
Description	Catalyst used for selective NO and NO2 reduction using NH3 as reactant Cordierite ceramic monolith substrate with Titania wash coat and V2O5 coating
Containment	304 stainless steel housing with removable lid. Ceramic blanket surrounding the unit blocks. Module: 12-1/2 x 12-1/2 x 12-1/2
Physical Properties	Washcoat surface area: > 80 m2/g Bulk Density: 36 lbs/ft3 Module Weight: 40 lbs
Application	Design Maximum Air Volume: 7,500 scfm Design Temperature: 450 – 650 F Ideal Temperature: 575 F (estimate) Volume Installed: 30 cf Space Velocity Installed: 15,000 hr ⁻¹ Number of Modules Installed: 30



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GUARD BED

Typical Chemical and Physical Properties

Catalyst Name	Guard Bed
Catalyst Form	300 cpsi Ceramic Honeycomb Monolith Unit Blocks: 5.91" x 5.91" x 1.5" 4 unit blocks per module
Description	Guard Bed used to provide a sacrificial layer located before active catalyst layers. Cordierite ceramic monolith substrate with Alumina wash coat
Containment	304 stainless steel housing with removable lid. Ceramic gasket surrounding the unit blocks. Module: 12-1/2 x 12-1/2 x 2
Physical Properties	Washcoat surface area: > 180 m ² /g Bulk Density: 36 lbs/ft ³ Module Weight: 10 lbs
Application	Design Maximum Air Volume: 7,500 scfm Design Temperature: < 1,100 F Volume Installed: 3.75 cf Number of Modules Installed: 30



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Attached is also the burner specification sheet from the burner manufacturer.

CATALYTIC PRODUCTS
INTERNATIONAL

BURNER

NGB 293-0-70

DETAILED INFORMATION

DESCRIPTION:	Natural Gas Burner: The pre-heat burner is designed to raise the process off gas to the desired catalyst bed inlet temperature. The system uses an externally mounted combustion air blower to provide the necessary combustion air.
MANUFACTURER:	MAXON
MODEL NUMBER:	OPLA ASUNSHYIBAN
BURNER STYLE:	Oven Pak LE - EB Burner – External Blower
SIZE:	(A) OPLE EB40, 4MMBtu/HR
INSTALLED CAPACITY	3.00 MMBTUH WITH 3,000 CFH NG AT GAS TRAIN
CONNECTIONS:	Air-6", Gas-1.25"
PILOT:	Standard Interrupted Pilot, 80,000 BTUH maximum capacity
FLAME DETECTION:	UV Scanner
FUEL:	Natural Gas @ 1,000 BTU/SCF
GAS TURNDOWN	50:1 MAXIMUM
NOX EMISSION RATE	0.06 LBS/MMBTU EXPECTED
CO EMISSION RATE	0.30 LBS/MMBTU EXPECTED
MIXING CONE:	Standard Mixing Cone
DISCHARGE SLEEVE:	High Temperature Sleeve 330SS
OVEN WALL GASKET:	Gasket Provided
CONTROL VALVES:	Internal Control Valves
CB&L:	Smart link MRV
POSITION SWITCH:	No Position Switch
AIR SHAFT SIDE:	Right

NOTES

1. None

FULL TAG LIST

TAG NO.	SERVICE	P&ID
NGB 293-0-70	AIR	31A

END DATA SHEET

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e-mail: info@cpilink.com website: www.cpilink.com

Bulk Specialty Solvent Waste Treatment System

Section 6 Information

Table 2-F: Additional Emissions during Startup, Shutdown, and Routine Maintenance (SSM)

Emission from the bulk specialty solvent waste treatment system during SSM will not require an increase in the Requested Allowable Emissions listed in Table 2G. When and bulk specialty solvent waste treatment system is shutdown for any reason, including routine maintenance, there are no combustion emissions, or emissions from burning natural gas during this time. There will be no other air emissions any time the system is not operating as this system is designed to treat a RCRA defined reactive waste to make it safe for offsite shipment.

Table 2-G: Stack Exit and Fugitive Emission Rates for Special Stacks

Hourly Emission Limits

The hourly emission limits requested are based on the manufacturer's data from the combustion of natural gas.

Annual Emission Limits

Condition 2.B.i of Air Quality Permit #0325-M11R2 states the plant site emission limits (PSELs) for NO_x and CO. Intel is not requesting a modification to the PSELs. The PSEL for NO_x is 95.7 tons and the PSEL for CO is 94.7 tons.

Condition 4.B. of Air Quality Permit #0325-M11R2 states the PSEL for VOCs. Intel is not requesting a modification to the PSELs. The PSEL for VOCs is 96.5 tons.

Section 7 Information

Information to Support Table 2-C Emissions Control Equipment and Table 2-G Stack Exit and Fugitive Emission Rates for Special Stacks

Attached is the burner specification sheet from the burner manufacturer.



3. BURNER SYSTEM

The burner will be an Eclipse Thermjet Nozzle Mix Burner. A nozzle mix burner uses external combustion air to provide sufficient oxygen even in an oxygen-deficient air stream, these burners can provide a high turndown, and this particular burner offers low byproducts of combustion. The burner is designed to promote mixing when fired into the combustion tube. This design provides the high velocity which creates a tremendous amount of turbulence and leads to the excellent temperature uniformity for which QUADRANT oxidizers are known. The Eclipse Thermjet is fired on natural gas and emits low levels of NO_x and CO.

The Burner System will include the following:

- 3.1. Eclipse Thermjet nozzle mix gas burner system
 - 3.1.1. Installed Capacity: 500,000 MMBTUH
 - 3.1.2. Minimum Fire: 60,000 BTUH
 - 3.1.3. Discharge: Ceramic discharge sleeve pre-mounted into the combustion chamber
 - 3.1.4. Natural gas operation at 500 CFH @ 5 psig

Boiler

Section 6 Information

Table 2-E: Requested Allowable Emissions

Hourly Emission Limits

The hourly rates listed for NO_x, CO, SO₂, TSP and PM₁₀ are the same rates that are currently permitted for the existing boilers. Intel is not requesting a change to these emission rates.

Annual Emission Limits

Condition 2.B.i of Air Quality Permit #0325-M11R2 states the plant site emission limits (PSELs) for NO_x and CO. Intel is not requesting a modification to the PSELs. The PSEL for NO_x is 95.7 tons and the PSEL for CO is 94.7 tons.

Condition 4.B. of Air Quality Permit #0325-M11R2 states the PSEL for VOCs. Intel is not requesting a modification to the PSELs. The PSEL for VOCs is 96.5 tons.

Table 2-F: Additional Emissions during Startup, Shutdown, and Routine Maintenance (SSM)

Emission from the boilers during SSM will not require an increase in the Requested Allowable Emissions listed in Table 2E. When a boiler is shutdown for any reason, including routine maintenance, there are no combustion emissions, or emissions from burning natural gas during this time. A boiler during start up is run in the low fire position and emissions during this time will also remain below the requested allowable levels listed in Table 2E.

Table 2-I: Stack Exit and Fugitive Emission Rates for HAPs and TAPs

There are no individual TAPs that exceed the screening levels specified in Table 2I and therefore no individual TAPs are required to be reported in this section. See "Information Applicable to All Equipment" for information HAPs from the combustion of natural gas.

Section 7 Information

Information to Support Table 2-E Requested Allowable Emissions

Standard guarantee of 10 ppm CO is as follows.

Once again the CO reading must be corrected to 3% O₂ (already there)

The corrected value in ppm CO is divided by a constant.

$10\text{ppm} / 1370 = .007 \text{ lbs/mmbtu}$



First the O2 reading is corrected to 3% (in our case that was the prediction).

Then the corrected value of NO_x is divided by 850 (a constant).

$30\text{ppm}/850 = .035\text{ lbs/mmbtu}$.

This can also be run with your actual site data correcting to 3%. If you are running sub 3% the correction will lower the ppm value and subsequently lower your lbs/mmbtu value as well.



Plant on Site

6 x Superior steam boilers

Model Number 6 - 5 - 6250

Year built: 1994

Boiler Output: 43,125 lbs/hr.

Our supply would be per boiler

- 1 x LCNO 175 Dual fuel burner firing Natural Gas and Number fuel 2 oil. Burner input would be 52,500,000 Btu/hr.
- 1 x Transitional duct to connect the existing fan to the new burner.
- 1 x Number 2 fuel oil pump set.
- 1 x control panel complete with Autoflame MM Mk 6 unit.

Natural gas firing

In order to achieve the 5:1 turndown requirements where firing natural gas, we will use a split gas head design. The split head requires a minimum gas pressure of 3.5 psi after the gas train.

Natural gas firing performance expectations:

- O₂ 3%
- CO₂ 10%
- CO Sub 10ppm
- NO_x Sub 30 ppm
- Turn down 5:1

Number 2 Oil (back up fuel)

In order to achieve a 4: 1 turndown firing on number 2 oil, we would propose to use a pressure atomised oil lance.

Number 2 firing performance expectations:

- O₂ 3 - 3.5 %
- CO₂ 12.5 - 13%
- Smoke less than Number 1
- turn down 4:1

Engineering

To confirm our pricing, we will need to obtain boiler furnace pressure, furnace dimensions center line of burner to the ground etc. as this will ensure that our offer is suitable for the boiler applications in mind. The transitional duct will be manufactured to fit the new burner and the existing FD fan.

Cooling Towers

Section 6 Information

Table 2-E: Requested Allowable Emissions

Hourly Emission Limits

The hourly emissions rates for particulates (TSP, PM10 and PM2.5) are based on maximum flow rate, maximum expected total dissolved solids and drift loss.

TDS= 7000 mg/l
rho 2.2

Droplet Diameter um	Droplet Volume (um) ³	Droplet Mass ug	PM Mass ug	PM Volume (um) ³	Solid Diameters um	Mass Fraction %
10	523.6	0.001	3.67E-06	1.7	1.5	0
20	4188.7	0.004	2.93E-05	13.3	2.9	0.2
30	14136.8	0.014	9.90E-05	45.0	4.4	0.2
40	33509.5	0.034	2.35E-04	106.6	5.9	0.5
50	65448.2	0.065	4.58E-04	208.2	7.4	1.8
60	113094.4	0.113	7.92E-04	359.8	8.8	5.7
70	179589.7	0.180	1.26E-03	571.4	10.3	21.3
90	381693.6	0.382	2.67E-03	1214.5	13.2	48.8
110	696892.0	0.697	4.88E-03	2217.4	16.2	70.5
130	1150316.8	1.150	8.05E-03	3660.1	19.1	82.0
150	1767100.2	1.767	1.24E-02	5622.6	22.1	88.0
180	3053549.1	3.054	2.14E-02	9715.8	26.5	91.0
210	4848922.9	4.849	3.39E-02	15428.4	30.9	92.5
240	7238042.4	7.238	5.07E-02	23030.1	35.3	94.1
270	10305728.3	10.306	7.21E-02	32791.0	39.7	94.7
300	14136801.6	14.137	9.90E-02	44980.7	44.1	96.3
350	22448717.3	22.449	1.57E-01	71427.7	51.5	97.0
400	33509455.6	33.509	2.35E-01	106621.0	58.8	98.3
450	47711705.3	47.712	3.34E-01	151810.0	66.2	99.1
500	65448155.4	65.448	4.58E-01	208244.1	73.5	99.1
600	113094412.6	113.094	7.92E-01	359845.9	88.2	100

Calculating Realistic PM10 Emissions from Cooling Towers

Abstract No. 216 Session No. AM-1b

Joel Reisman and Gordon Frisbie

Equation For PM

$$PM_{10} / (lbs/hr) = (Recirc\ Rate / gal/min) * (60 / min/hr) * (Drift\ factor / (\%/100)) * (Dispersion\ Factor / (\%/100)) * (TDS / lb/gal)$$

Dispersion Factor (for TSP) 0.313

1979 EPA document "Effects of Pathogenic and Toxic

only)

Materials Transported Via Cooling Device Drift - Vol 1. Technical Report, EPA-600/7-79-251a, November 1979. Figure 8 indicates that larger droplets drop out quickly and that "31.3% of drift mass governed by atmospheric dispersion".

TDS
(ppm) 7000
PM10 21.348 assumed value closest to 10 um
PM2.5 0.196 assumed value closest to 2.5 um

	max gpm per pump	drift rate %	lb/hr TSP	lb/hr PM10	lb/hr PM2.5
NEC7 CT1	6000	0.02	1.32	0.90	0.008
NEC7 CT2	6000	0.02	1.32	0.90	0.008
NEC7 CT3	6000	0.02	1.32	0.90	0.008
NEC7 CT4	3000	0.02	0.66	0.45	0.004
NEC9 CT1	6000	0.02	1.32	0.90	0.008
NEC9 CT2	6000	0.02	1.32	0.90	0.008
NEC9 CT3	6000	0.02	1.32	0.90	0.008
NEC9 CT4	6000	0.02	1.32	0.90	0.008
NEC9 CT5	6000	0.02	1.32	0.90	0.008
NEC9 CT6	6000	0.02	1.32	0.90	0.008
NEC9 CT7	6000	0.02	1.32	0.90	0.008
NEC9 CT8	6000	0.02	1.32	0.90	0.008
CUB CT1	7500	0.002	0.16	0.11	0.001
CUB CT2	7500	0.002	0.16	0.11	0.001
CUB CT3	7500	0.002	0.16	0.11	0.001
CUB CT4	7500	0.002	0.16	0.11	0.001
CUB CT5	7500	0.002	0.16	0.11	0.001
CUB CT6	7500	0.002	0.16	0.11	0.001
CUB CT7	7500	0.002	0.16	0.11	0.001
CUB CT8	7500	0.002	0.16	0.11	0.001
CUB CT9	7500	0.002	0.16	0.11	0.001
CUB CT10	7500	0.002	0.16	0.11	0.001
CUB CT12	7500	0.002	0.16	0.11	0.001
BCP CT1	10000	0.002	0.22	0.15	0.0014
BCP CT2	10000	0.002	0.22	0.15	0.0014
BCP CT3	10000	0.002	0.22	0.15	0.0014
BCP CT4	10000	0.002	0.22	0.15	0.0014
BCP CT5	10000	0.002	0.22	0.15	0.0014
BCP CT6	10000	0.002	0.22	0.15	0.0014
BCP CT7	10000	0.002	0.22	0.15	0.0014
BCP CT8	10000	0.002	0.22	0.15	0.0014
BCP CT9	10000	0.002	0.22	0.15	0.0014
BCP CT10	10000	0.002	0.22	0.15	0.0014

Intel

Cooling Tower PM10 Calculation

TDS= 1000 mg/l

rho 2.2

Droplet Diameter um	Droplet Volume (um) ³	Droplet Mass ug	PM Mass ug	PM Volume (um) ³	Solid Diameters um	Mass Fraction %
10	523.6	0.001	5.24E-07	0.2	0.8	0.0
20	4188.7	0.004	4.19E-06	1.9	1.5	0.2
30	14136.8	0.014	1.41E-05	6.4	2.3	0.2
40	33509.5	0.034	3.35E-05	15.2	3.1	0.5
50	65448.2	0.065	6.54E-05	29.7	3.8	1.8
60	113094.4	0.113	1.13E-04	51.4	4.6	5.7
70	179589.7	0.180	1.80E-04	81.6	5.4	21.3
90	381693.6	0.382	3.82E-04	173.5	6.9	48.8
110	696892.0	0.697	6.97E-04	316.8	8.5	70.5
130	1150316.8	1.150	1.15E-03	522.9	10.0	82.0
150	1767100.2	1.767	1.77E-03	803.2	11.5	88.0
180	3053549.1	3.054	3.05E-03	1388.0	13.8	91.0
210	4848922.9	4.849	4.85E-03	2204.1	16.1	92.5
240	7238042.4	7.238	7.24E-03	3290.0	18.5	94.1
270	10305728.3	10.306	1.03E-02	4684.4	20.8	94.7
300	14136801.6	14.137	1.41E-02	6425.8	23.1	96.3
350	22448717.3	22.449	2.24E-02	10204.0	26.9	97.0
400	33509455.6	33.509	3.35E-02	15231.6	30.8	98.3
450	47711705.3	47.712	4.77E-02	21687.1	34.6	99.1
500	65448155.4	65.448	6.54E-02	29749.2	38.4	99.1
600	113094412.6	113.094	1.13E-01	51406.6	46.1	100

Calculating Realistic PM10 Emissions from Cooling Towers

Abstract No. 216 Session No. AM-1b

Joel Reisman and Gordon Frisbie

TDS (ppm)	1000	
PM10	82.023	assumed value closest to 10 um
PM2.5	0.514	assumed value closest to 2.5 um

	max gpm per pump	drift rate %	lb/hr TSP	lb/hr PM10	lb/hr PM2.5
APCI 1	1640	0.03	0.08	0.20	0.001
APCI 2	1640	0.03	0.08	0.20	0.001
APCI 3	1640	0.03	0.08	0.20	0.001

Annual Emission Limits

Intel proposes a plant site emission limit of 95 tons per year of TSP, 95 tons per year PM10 and 95 tons per year for PM2.5 for all particulate emission sources at the site.

Table 2-F: Additional Emissions during Startup, Shutdown, and Routine Maintenance (SSM)

Emission from the cooling towers during SSM will not require an increase in the Requested Allowable Emissions listed in Table 2E.

Table 2-I: Stack Exit and Fugitive Emission Rates for HAPs and TAPs

There are no individual TAPs that exceed the screening levels specified in Table 2I and therefore no individual TAPs are required to be reported in this section.

Intel uses sodium bromide as a biocide in the cooling towers. Intel has assumed, conservatively, that the bromoform found during water sampling is emitted to the atmosphere. Emissions for Table 2I for bromoform are based on the emissions report submitted to NMED for Q4 2011. The site currently has a PSEL for individual HAPs along with semi-annual reporting requirements. The cooling towers will remain below the current PSELs.

Section 7 Information

Information to support Table 2-E Requested Allowable Emissions

NEC Cooling Towers: Drift loss: less than .02% of recirculating water flow rate.

CUB/BCP Cooling Towers: Drift Loss .002% of Total Flow per sensitive paper method

Table 2-I: Stack Exit and Fugitive Emission Rates for HAPs and TAPs

Excerpt from Quarterly Emissions Report submitted to NMED for Q4 2011 for HAP emissions from the Fab.

Emissions	Calculated Rolling Annual Emissions January'11 through December'11 (tons/year)
Bromoform	1.28

Scrubbers***Section 6 Information*****Table 2-F: Additional Emissions during Startup, Shutdown, and Routine Maintenance (SSM)**

Emission from the cooling towers during SSM will not require an increase in the Requested Allowable Emissions listed in Table 2G.

Table 2-G: Stack Exit and Fugitive Emission Rates for Special Stacks**Hourly Emission Limits**

The hourly emissions limits included in Table 2 are based on historical data that was included in 325-M9 permit application and all dispersion modeling conducted since that permit application. These emission rates were included in the dispersion model report included in Section 16 and those same values have been placed in Table 2E. Intel is not proposing that these emission rates be modified at this time. To verify that this data is still applicable to current operations Intel has used maximum flow rate, maximum expected total dissolved solids and drift loss. These values are applied in the same manner, using the equation described for cooling towers. The maximum TDS is the same as that expected for the cooling towers at 7000ppm. The maximum flow rate for each individual scrubber on site is 800 gpm. The drift loss reported by the manufacture is 0.001%. The maximum expected hourly emissions are calculated as TDS x maximum recirculation rate x drift loss as follows:

$$(7000\text{mg/l} / 1000\text{mg/g} / 453.6\text{g/lb} \times 3.785 \text{ l/gal}) \times 800 \text{ gallons/min} \times 60 \text{ min/hr} \times 0.001\%/100 = 0.028 \text{ lb/hr}$$

While it is not expected that TSP=PM10=PM2.5, Intel conservatively assumes that they are all equal for purposes of this permit application.

Annual Emission Limits

Intel proposes a plant site emission limit of 95 tons per year of TSP, 95 tons per year PM10 and 95 tons per year for PM2.5 for all particulate emission sources at the site.

Section 7 Information**Information to support Table 2-G Stack Exit and Fugitive Emission Rates for Special Stacks**

Drift loss: 0.001% based on testing conducted by equipment manufacture.

Fab

The fab emissions unit, identified as Fab 11, includes all tools, equipment and activities within the fab and subfab as well as all thermal oxidizers, all scrubbers, all wastewater treatment systems including the trimix and bulk specialty solvent waste system, and all waste systems.

Section 6 Information**Table 2-F: Additional Emissions during Startup, Shutdown, and Routine Maintenance (SSM)**

Emission from the fab during SSM will not require an increase in the Requested Allowable Emissions listed in Table 2E.

Table 2-I: Stack Exit and Fugitive Emission Rates for HAPs and TAPs

Emissions for Table 2I for total HAPs are based on the emissions report submitted to NMED for Q4 2011. Currently site emissions of hydrochloric acid exceed the screening level referenced in Table 2I and are therefore included. The site currently has a PSEL for total and individual HAPs along with semi-annual reporting requirements. The fab will remain below the current PSELs.

Section 7 Information**Table 2-I: Stack Exit and Fugitive Emission Rates for HAPs and TAPs**

Excerpt from Quarterly Emissions Report submitted to NMED for Q4 2011 for HAP emissions from the Fab.

Emissions	Calculated Rolling Annual Emissions January'11 through December'11 (tons/year)
HCl	2.18

Information Applicable to all Equipment

Section 6 Information

Table 2-I: Stack Exit and Fugitive Emission Rates for HAPs and TAPs

There are no individual TAPs that exceed the screening levels specified in Table 2I and therefore no individual TAPs are required to be reported in this section for any emissions units.

The combustion of natural gas is a source of hexane emissions. The estimated site use of natural gas projected to be 3,222 MMscf. The AP-42 EF for hexane is 1.8 lb/MM scf therefore the projected hexane emissions from the site combustion of natural gas is 2.9 tons per year.

Section 7 Information

Information to Support Table 2-E Requested Allowable Emissions

Excerpt from Quarterly Emissions Report submitted to NMED for Q4 2011 – Rolling annual emissions for the site. Current rolling annual emissions demonstrate that the site will remain below all PSELs.

12-Month Rolling Total Emissions

Emissions	Calculated Rolling Annual Emissions January'11 through December'11 (tons/year)
VOC	32.04
NO _x	30.72
CO	10.59
Particulates (from RTOs)	4.45
Total HAPs Emissions (tons):	5.96

Section 7 Information

Table 2-I: Stack Exit and Fugitive Emission Rates for HAPs and TAPs

Excerpt from Quarterly Emissions Report submitted to NMED for Q4 2011 for TAP emissions from the site.

TAP Total Potential Emissions

TAP	Emission Factor	20 NMAC 2.72 Screening Level (lb/hr)	Corrected Screening Level (lb/hr)	Q4 2011 Total Potential Emissions (lb/hr)
Ammonia*	1	1.20	19.18	14.77
Cyclohexanone	1	6.67	126.73	84.57
Isopropyl Alcohol	1	65.3	N/A	48.97
Nitrogen Trifluoride	1	2.00	38.00	12.93
Silicon Tetrahydride (Silane)	1	0.467	8.87	1.71
Tungsten Compounds (insoluble)	1	0.333	1.67	1.06

Greenhouse Gas Emissions

Section 6 & 7 Information

Information to Support Table 2-P Greenhouse Gas Emissions

All natural gas and diesel combustion as well as semiconductor manufacturing are sources of greenhouse gas emissions. The following information provides the detailed calculations for greenhouse gas emissions from the site.

Emission from natural gas and diesel combustion:

AP-42 Emission Factors for CO₂/CO_{2e}

Natural Gas: 117.28 lb/MMBtu

Diesel: 161.38 lbs/10³ gallon or lbs/hr or lb/MMBtu

- The estimated site use of natural gas projected to be 3,222 MMscf.
- The average heat content of natural gas is 1028 Btu/scf
- The estimated boiler use of diesel is projected to be 234,000 gallons
- The estimated emergency generator use is projected to be 75,000 gallons
- The heat content of diesel is 138,000 Btu/gallon

Natural Gas – 194,228 tons/year CO₂ or CO_{2e}

Diesel – 3,440 tons/year CO₂ or CO_{2e}

Emission from Semiconductor Manufacturing:

	SF6	N2O	CF4	CHF3	C4F8	C2F6	CH2F2	C2F4	CO2
Mass Basis	7.56E-03	7.05E-01	1.52E-02	4.58E-03	1.25E-03	1.52E-03	6.76E-05	7.70E-04	4.11E-01
GWP*	23900	310	6500	11700	8700	9200	650	0.021	1
CO _{2e}	1.81E+02	2.19E+02	9.89E+01	5.35E+01	1.09E+01	1.40E+01	4.40E-02	1.62E-05	4.11E-01

*Table A-1 of 40 CFR 98 Subpart A Global Warming Potentials (100-Year Time Horizon)

GHG CO _{2e} Emissions	CO _{2e} Emissions (tons)	Mass Emissions (tons)
SF6	85207.5	3.6
N2O	103105.3	332.6
CF4	46666.1	7.2
CHF3	25258.2	2.2
C4F8	5130.5	0.59
C2F6	6597.2	0.72
CH2F2	20.7	0.03
C2F4	0.01	0.36
CO2	194.1	194.1
Total Tons	272180	541

Section 21 **[not applicable]**

Addendum for Landfill Applications

Do not print this section unless this is a landfill application.

Landfill Applications are not required to complete Sections 1-C and 1-E. All other Sections are required.

21-A: Landfill Information

1	How long will the landfill be operated?		
2	Maximum operational hours per year:		
3	Landfill Operating hours (open to the public) M-F:	Sat.	Sun.
4	Landfill Design Capacity (Tons):	Megagrams:	Cubic meters:
5	Landfill NMOC Emission Rate	<input type="checkbox"/> Less than 50mg/year	<input type="checkbox"/> Greater than 50mg/year
6	Annual Waste Acceptance Rate:		
7	Is Petroleum Contaminated Soil Accepted?	If so, what is the annual acceptance rate?	
8	NM Solid Waste Permit No.:	SW Permit Date:	
9	Describe NM Solid Waste Permit, Status, and Type of waste deposited at landfill		
10	Describe briefly any process(es) or any other operations conducted at the landfill		

21-B: NMOC Emissions

1	NMOC Emissions based on LandGEM:
2	Tier 1:
3	Tier 2:
4	Tier 3:

EMISSIONS (refer to 40 CFR 60.754 for test methods and procedures or AP-42 Sect.2.4)
 Include the latest LandGEM calculations and/or testing results.
 Facilities that have a Landfill GCCS complete the following section.

21-C: Landfill Gas Collection and Control System (GCCS) Design Plan		Yes	No
1	Was the GCCS design certified by a P.E?		
2	Was the Design System Plan submitted within 12 months of the first report of the site exceeding 50Mg/yr?		
3	Is the GCCS planned to be operational within 30 months of the first report of the site exceeding 50 Mg/yr?		
4	Does the GCCS comply with the 2 year/5 year rule?		
5	Is the design life of the GCCS more than 15 years?		
6	Have measures been taken in the GCCS Plan to control lateral gas migration?		
7	If the GCCS design is for a passive system (non enhanced), are the necessary liners in place?		
8	Is adequate density of collectors planned?		
9	Is the Landfill gas conveyance system sized properly?		
10	Is the landfill gas planned to be routed to a control device? (Utility flare, enclosed flare or other)		
11	If the control device is a flare, does it include continuous temperature monitoring and a flow measurement device?		
12	Is the flare sized properly?		
13	Does the GCCS include fittings to allow connection of additional collectors if necessary in the future?		
14	Does the wellhead for all collectors include at least one sample port and one thermometer port?		
15	Operational Issues: 1. Will the GCCS be operated at a vacume at every well? 2. Will the GCCS be operated at the appropriate gas temps? 3. Will the GCCS be operated with minimal amounts of air? 4. Will monitoring be done monthly to conform with these operational issues? 5. Will surface emissions monitoring be completed? 6. Will the blower automatically be shut down if the control device is inoperable?		
16	Was the design diagram for the GCCS, including the flare, blower, and well location attached to the permit application?		

Section 22

Green House Gas Applicability

(submitting under 20.2.70, 20.2.72, 20.2.73, 20.2.74 NMAC)

Title V (20.2.70 NMAC), NSR (20.2.72 NMAC), NOI (20.2.73 NMAC) and PSD (20.2.74 NMAC) applicants must determine if they are subject to Title V permitting and/or PSD permitting for green house gas (GHG) emissions. GHG emissions are the sum of the aggregate group of six green house gases that include carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). There are two thresholds that must be computed to determine applicability. The first threshold is the sum of GHG mass emissions in TPY. GHG mass emissions are the sum of the total annual tons of green house gases without adjusting with the GWPs. The second threshold is the sum of CO₂ equivalent (CO₂e) emissions in TPY GHG. CO₂e emissions are the sum of the mass emissions of each individual GHG multiplied by its global warming potential (GWP) found in Table A-1 in 40 CFR 98 Mandatory Greenhouse Gas Reporting.

Green House Gas TV and PSD Applicability Determination:

Notice of Intent Sources (20.2.73 NMAC): By checking this box and certifying this application the applicant certifies that the facility, based upon the quantity of stack emissions, including start up, shut down, and maintenance emissions, is not subject to 20.2.70 NMAC or 20.2.74 NMAC for Green House Gas (GHG) Emissions. The Department may request the emissions calculations and other documents supporting this determination.

Minor NSR (20.2.72 NMAC), PSD Major (20.2.74 NMAC), and Title V (20.2.70 NMAC) sources must complete the steps outlined below to determine GHG TV and/or PSD applicability.

1. Calculate existing mass GHG and CO₂e emissions from your source. For PSD purposes, if this is a modification to an existing source, you must also calculate the increase in mass GHG and CO₂e emissions due to the modification. Start up, shut down, and maintenance emissions must be included.
2. See Tables 1 and 2 below and compare your mass GHG and CO₂e emissions to the appropriate category for your source.
3. If your source meets all of the criteria within a category, then you must obtain a PSD permit and/or a Title V permit for green house gas emissions.
4. If this is a GHG Major source with an existing BACT or if this is a permit application for a PSD or Title V permit with GHG above the thresholds in Tables 1 or 2, include the emissions calculations and supporting documents in the appropriate sections of this application unless instructed otherwise in Tables 1 or 2. Report GHG mass and CO₂e emissions in Table 2-P of this application unless instructed otherwise in Tables 1 or 2. Emissions are reported in short tons per year and represent each emission unit's Potential to Emit (PTE).

NSR (20.2.72 NMAC), PSD Major (20.2.74 NMAC), and Title V (20.2.70 NMAC): Based upon the GHG applicability criteria in this section the applicant certifies that the source is (check all that apply):

- Title V Minor and PSD Minor for GHG Emissions [The Department may request the emissions calculations and other documents supporting this determination.]
- Title V Major for GHG Emissions
- PSD Major for GHG Emissions

Table 1 - Title V Applicability Criteria

On or after July 1, 2011, newly constructed source, or existing source that does not have a Title V permit	On or after July 1, 2011, modification or Renewal to Existing Title V Source	Requirement
Source emits or has potential to emit (PTE) ≥ 100,000 TPY CO ₂ e and 100 TPY GHG mass basis	Source emits or has PTE of ≥100,000 TPY CO ₂ e and 100 TPY GHG mass basis	<u>For new sources:</u> For a source that meets the criteria on July 1, 2011, submit a Title V permit application no later than June 30, 2012.

Table 1 - Title V Applicability Criteria

		<p>For a source that meets the criteria after July 1, 2011, submit a Title V application within 12 months of becoming subject to the GHG operating permit program (12 months from commencement of operation of the new unit or modification that caused the source to be subject to Title V).</p> <p><u>For existing sources:</u> Include GHG with the next Title V application for a renewal or modification.</p> <p><u>For both new and existing sources:</u> Include in the TV application, GHG emissions calculations and supporting documents, report CO₂e and GHG emissions in Table 2-P, and address any applicable CAA requirements (e.g. PSD BACT, NSPS). If there are no applicable requirements and if GHG emissions have been reported to the Department under 20.2.73 NMAC, the requirements of the previous sentence do not apply, but changes in GHG emissions resulting in GHG emission limits must be calculated and reported in Table 2-P for Title V permit modifications. Typically GHG emission limits would be established only when there is an applicable requirement, such as a PSD GHG BACT or limits taken to be GHG synthetic minor.</p>
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Table 2 - PSD Applicability Criteria

On or After July 1, 2011, New Source	On or After July 1, 2011, Major Modification to Existing PSD Major Source	On or After July 1, 2011, Modification to Existing PSD Minor Source	Requirement
<p>Source is subject to PSD for another pollutant and GHG PTE is \geq than 75,000 tpy CO₂e</p> <p>or</p> <p>GHG PTE is \geq 100,000 TPY CO₂e and \geq 100/250 TPY mass basis</p>	<p>Source is subject to PSD for another regulated pollutant and net GHG emissions increase is \geq 75,000 tpy CO₂e and greater than zero TPY mass basis</p> <p>or</p> <p>existing source has GHG PTE \geq 100,000 TPY CO₂e and \geq 100/250 TPY mass basis and net emissions GHG increase is \geq 75,000 TPY</p>	<p>Actual or potential emissions of GHGs from the modification is \geq 100,000 TPY CO₂e and \geq 100/250 TPY mass basis.</p> <p>Minor PSD sources cannot net out of PSD review.</p>	<p>The source is subject to PSD permitting for GHG emissions and other regulated pollutants that are significant. In the application include GHG emissions calculations and supporting documents, report CO₂e and GHG emissions in Table 2-P, complete a GHG BACT determination, and include the TPY CO₂e and GHG mass emissions in the public notice.</p> <p>Note: If a minor source permit is issued after January 2, 2011, but before July 1, 2011, and construction has not commenced by July 1, 2011, the permit must be</p>

Table 2 - PSD Applicability Criteria

	CO ₂ e and greater than zero TPY mass basis		cancelled, reopened, or an additional PSD permitting action taken, if the approved change/construction would trigger GHG PSD after July 1, 2011.
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Additional Information:**Sources for Calculating GHG Emissions:**

- Manufacturer's Data
- AP-42 Compilation of Air Pollutant Emission Factors at <http://www.epa.gov/ttn/chief/ap42/index.html>
- EPA's Internet emission factor database WebFIRE at <http://cfpub.epa.gov/webfire/>
- Subparts C through UU of 40 CFR 98 Mandatory Green House Gas Reporting except that tons should be reported in short tons rather than in metric tons for the purpose of PSD and TV applicability.
- API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry. August 2009 or most recent version.
- Sources listed on EPA's NSR Resources for Estimating GHG Emissions at <http://www.epa.gov/nsr/ghgresources.html>:
 - ENERGY STAR Industrial Sector Energy Guides and Plant Energy Performance Indicators (benchmarks) <http://www.energystar.gov>;
 - US EPA National Greenhouse Gas Inventory, <http://epa.gov/climatechange/emissions/usinventoryreport.html>;
 - EPA's Climate Leaders, <http://www.epa.gov/climateleaders/index.html>
 - EPA Voluntary Partnerships of GHG Reductions that include the landfill methane outreach program, the CHP partnership program, the Green Power Partnership, the Coalbed Methane Outreach program, the Natural Gas STAR program, and the Voluntary Aluminum Industrial Partnership.
 - SF Emission Reduction Partnership for the Magnesium Industry <http://www.epa.gov/highwp/magnesium-sf6/index.html>
 - PFC Reduction/Climate Partnership for the Semiconductor Industry <http://www.epa.gov/highwp/semiconductor-pfc/index.html>

Global Warming Potentials (GWP):

Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. Please note that sources not subject to 40 CFR 98 and/or 20.2.300 NMAC may still be subject to the GHG PSD and/or TV permitting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO₂ over a specified time period.

"Greenhouse gas" for the purpose of this part is defined as the aggregate group of the following six gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. (**20.2.70.7.O NMAC, 20.2.74.7.Y NMAC**). You may also find GHGs defined in 40 CFR 86.1818-12(a).

Short Tons:

Short tons for GHGs and other regulated pollutants are the standard unit of measure for PSD and title V permitting programs. 40 CFR 98 Mandatory Greenhouse Reporting requires metric tons.

1 metric ton = 1.10231 short tons (per Table A-2 to Subpart A of Part 98 – Units of Measure Conversions)

EPA's GHG Tailoring Rule:

To review EPA's final GHG Tailoring rule and pre-ambble, See "Final GHG Tailoring Rule dated May 13, 2010 located on EPA's NSR Regulations Webpage or Federal Register June 3, 2010 Volume 75, No. 106 <http://www.epa.gov/nsr/actions.html>

EPA Permitting Guidance:

EPA's Permitting Guidance for GHG and other GHG information can be found on EPA's NSR Clear Air Act Permitting for Greenhouse Gases webpage.

<http://www.epa.gov/nsr/ghgpermitting.html>

Section 23: Certification

Company Name: Intel Corporation

I, Brian Rashap, hereby certify that, based on information and belief formed after reasonable inquiry, the statements and information contained in the attached Title V report are true, accurate, and complete.

Signed this 11 day of APRIL, 2012, upon my oath or affirmation, before a notary of the State of

_____.

[Signature]
*Signature

4/11/12
Date

Brian Rashap
Printed Name

NM Corporate Services Manager
Title

Scribed and sworn before me on this 11 day of APRIL, 2012.

My authorization as a notary of the State of NEW MEXICO expires on the

22 day of MAY, 2012.

[Signature]
Notary's Signature

4/11/12
Date

Sandra K Britt
Notary's Printed Name



*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AD NMAC.