Appendix D: Terms and Abbreviations

ACGIH - American Conference of Governmental Industrial Hygienists, Inc.

ACI – Activated Carbon Injection

AFS – Automated Feed System

APC – Air Pollution Control

Be – Beryllium

Cd – Cadmium

CEM – Continuous Emission Monitoring

CO – Carbon Monoxide

CO_2 – Carbon Dioxide

D/F - Dioxin/Furans

DAS – Data Acquisition System

ECOM – Environmental Compliance Operations Manual

F – Fluorine

H&S – Health and Safety

H_2O – Water

HCl – Hydrochloric Acid

HF – Hydrofluoric Acid

Hg – Mercury

IH – Industrial Hygiene

JSA – Job Safety Assessments

LDI – Liquid Direct Injection

MCF – Material Characterization Form

MSW – Municipal Solid Waste

MWC – Municipal Waste Combustor

N_2 – Nitrogen

NHIW – Nonhazardous Industrial Waste

NO_X – Oxides of Nitrogen

O_2 – Oxygen

ODEQ – Oklahoma Department of Environmental Quality

OSHA – Occupational Safety and Health Administration

Pb – Lead

PM – Particulate Matter

PPE – Personal Protective Equipment

QA/QC – Quality Assurance/Quality Control

RMW – Regulated Medical Waste

SDS – Safety Data Sheet

SO_2 – Sulfur Dioxide

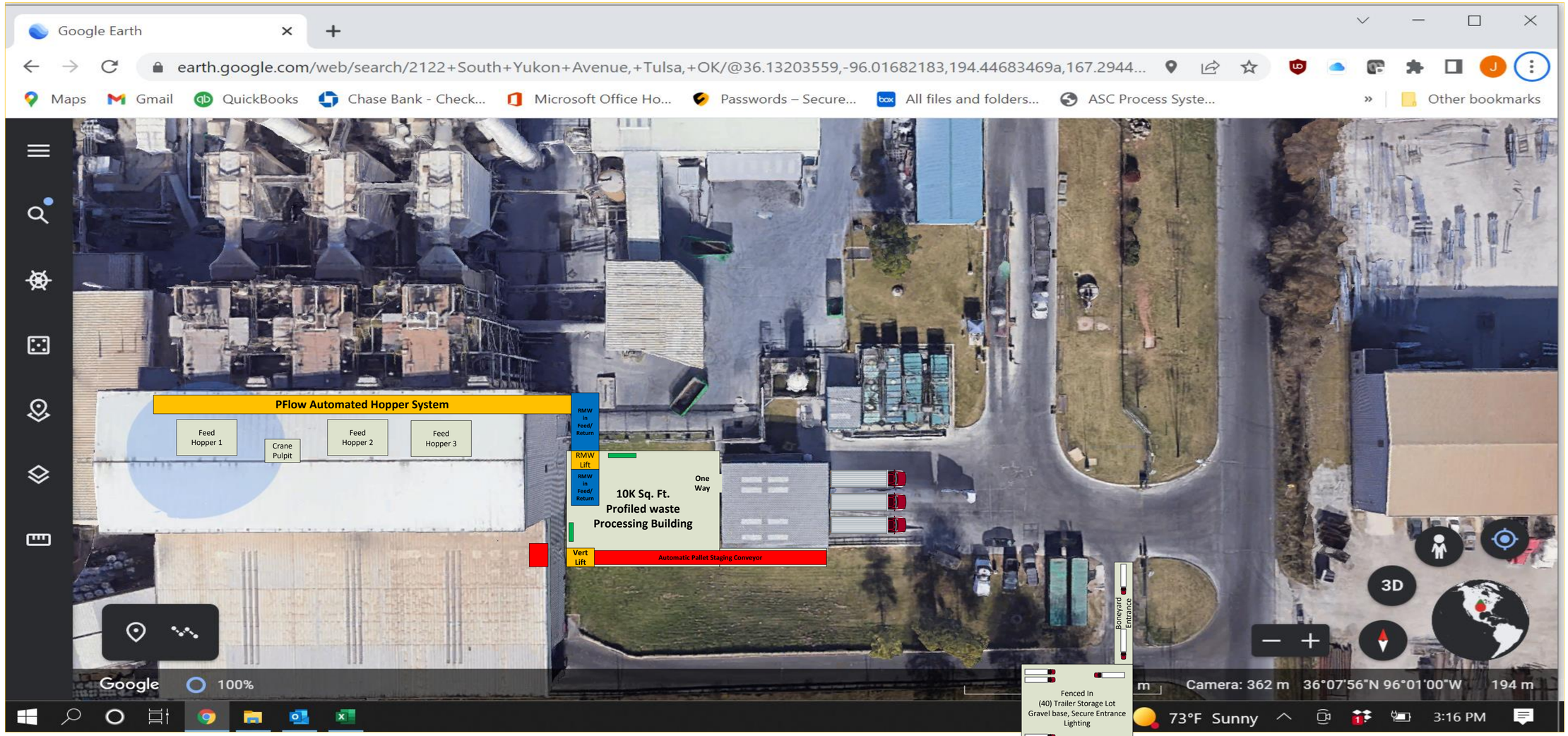
SOP – Standard Operating Procedure

SDA – Spray Dry Absorber

SNCR – Selective Noncatalytic Reduction

S.P. - Standard Procedure

VOC – Volatile Organic Carbon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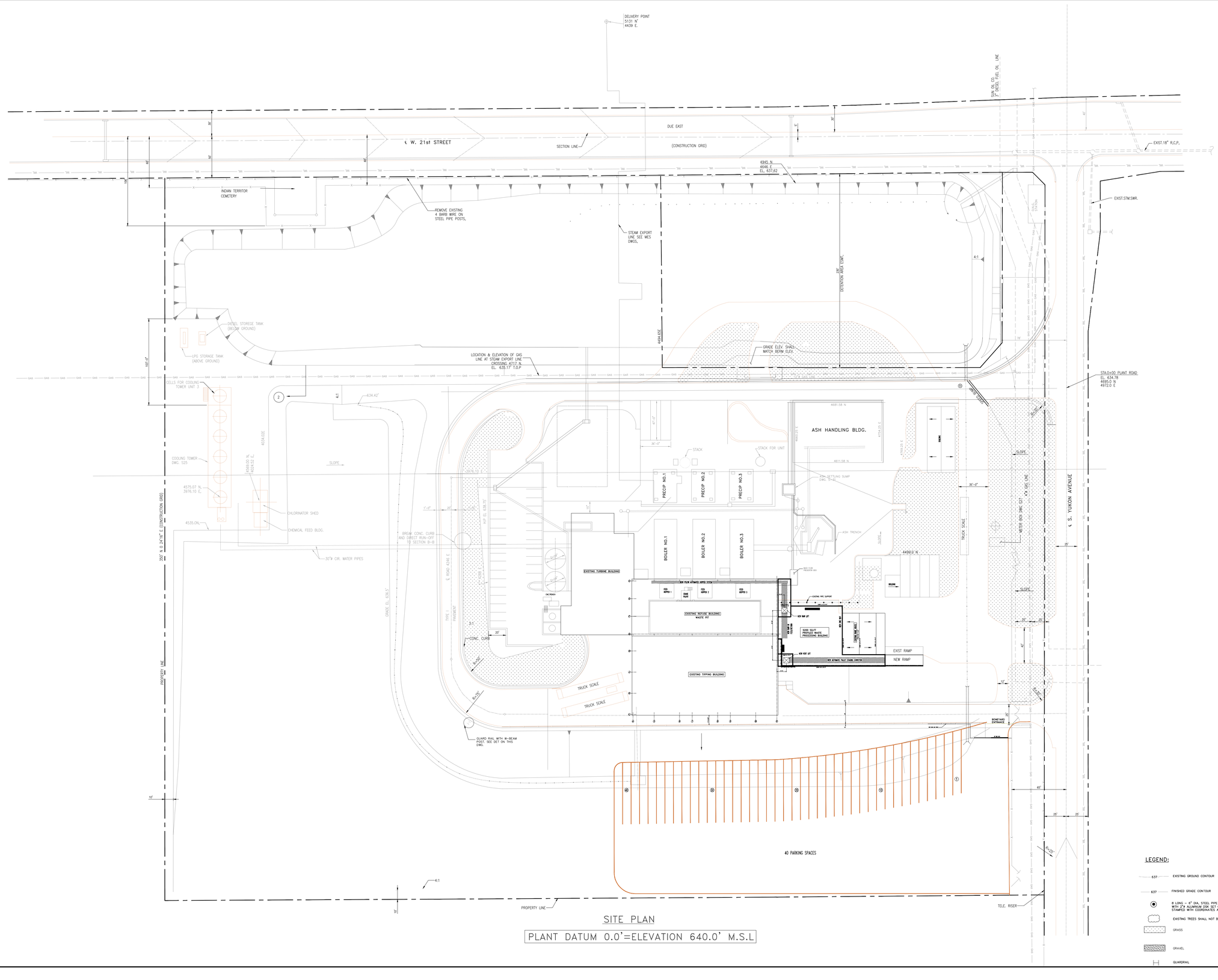
Maps
Gmail
QuickBooks
Chase Bank - Check...
Microsoft Office Ho...
Passwords – Secure...
All files and folders...
ASC Process Syste...
Other bookmarks
PFlow Automated Hopper System
Feed Hopper 1
Crane Pulpit
Feed Hopper 2
Feed Hopper 3
RMW in Feed/ Return
RMW Lift
RMW in Feed/ Return
10K Sq. Ft. Profiled waste Processing Building
One Way
Vert Lift
Automatic Pallet Staging Conveyor
Boneyard Entrance
Fenced In (40) Trailer Storage Lot Gravel base, Secure Entrance Lighting
3D
Google
100%
Camera: 362 m 36°07'56"N 96°01'00"W 194 m
73°F Sunny
3:16 PM



SITE PLAN

PLANT DATUM 0.0'=ELEVATION 640.0' M.S.L

OWNER:

STRUCTURAL ENGINEER:

EXL STRUCTURAL CONSULTANTS LLC

1 Blue Hill Plaza, Suite 1501, 1st Floor
Pearl River, NY 10965
Tel.: (201) 561-4911
Email: ekhalikar.raj@gmail.com

Seal & Signature:

RAJ EKHALIKAR

O.K. PROFESSIONAL ENGINEER
NO 29830

MEP ENGINEER :

SITE ENGINEER :

ARCHITECTURAL ENGINEER :

GEO -TECHNICAL ENGINEER :

No.	Revision	Date	By
0	ISSUED FOR PERMITS	12.08.2022	RM

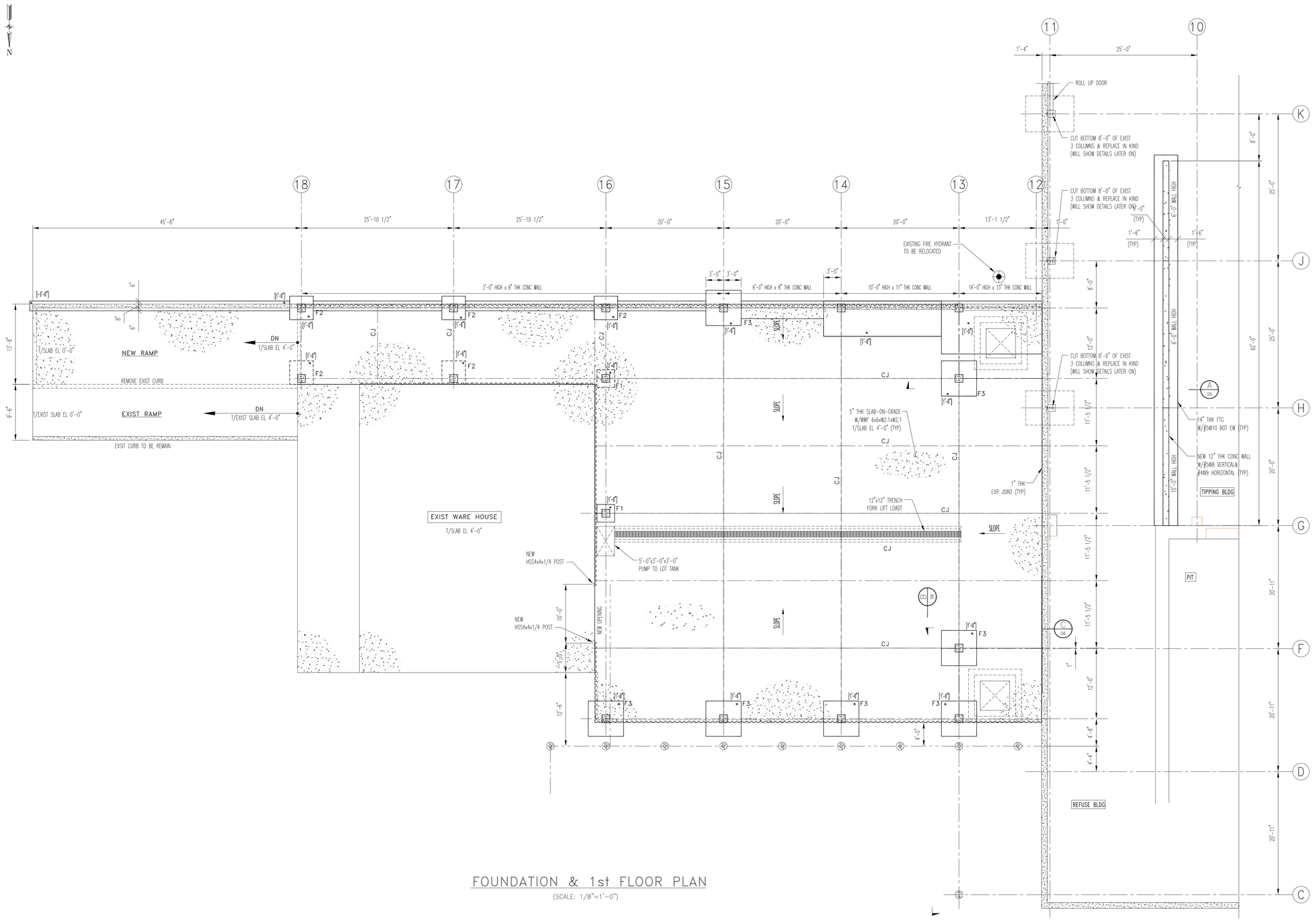
Project:

2122 S YUKON AVE
TULSA, OKLAHOMA

Drawing Title:

SITE PLAN

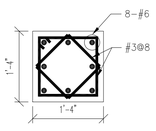
Date:	12.08.2022
Project No.:	22-075
Drawn By:	RM
Scale:	1/32"=1'-0"
Drawing No.:	E-3
Page:	1 OF 1
DOB Filling No:	



FOUNDATION & 1st FLOOR PLAN

(SCALE: 1/8"=1'-0")

FOOTING TABLE					
SL NO.	FOOTING NO.	FOOTING SIZE L	FOOTING SIZE B	FOOTING SIZE T	REINFORCEMENT
1.)	F1	3'-0"	3'-0"	12"	#5@9" BOT (BOTH WAYS)
2.)	F2	4'-0"	4'-0"	12"	#5@8" BOT (BOTH WAYS)
3.)	F3	6'-0"	6'-0"	12"	#5@8" BOT (BOTH WAYS)



TYPICAL CONC PIERS

(SCALE: 3/4"=1'-0")

LEGEND:

1. DENOTES BLOCK
2. DENOTES CONC

GRAPHIC SCALE: 1/8" = 1'-0"

0' 5' 10' 15' 20' 25' 30

OWNER:

STRUCTURAL ENGINEER:

PDM SERVICES LLC
TARPON SPRINGS
FLORIDA 34689

Seal & Signature:

MEP ENGINEER :

SITE ENGINEER :

ARCHITECTURAL ENGINEER :

GEO -TECHNICAL ENGINEER :

No.	Revision	Date	By
A	ISSUED FOR REVIEW & COMMENTS	04.18.2022	RM

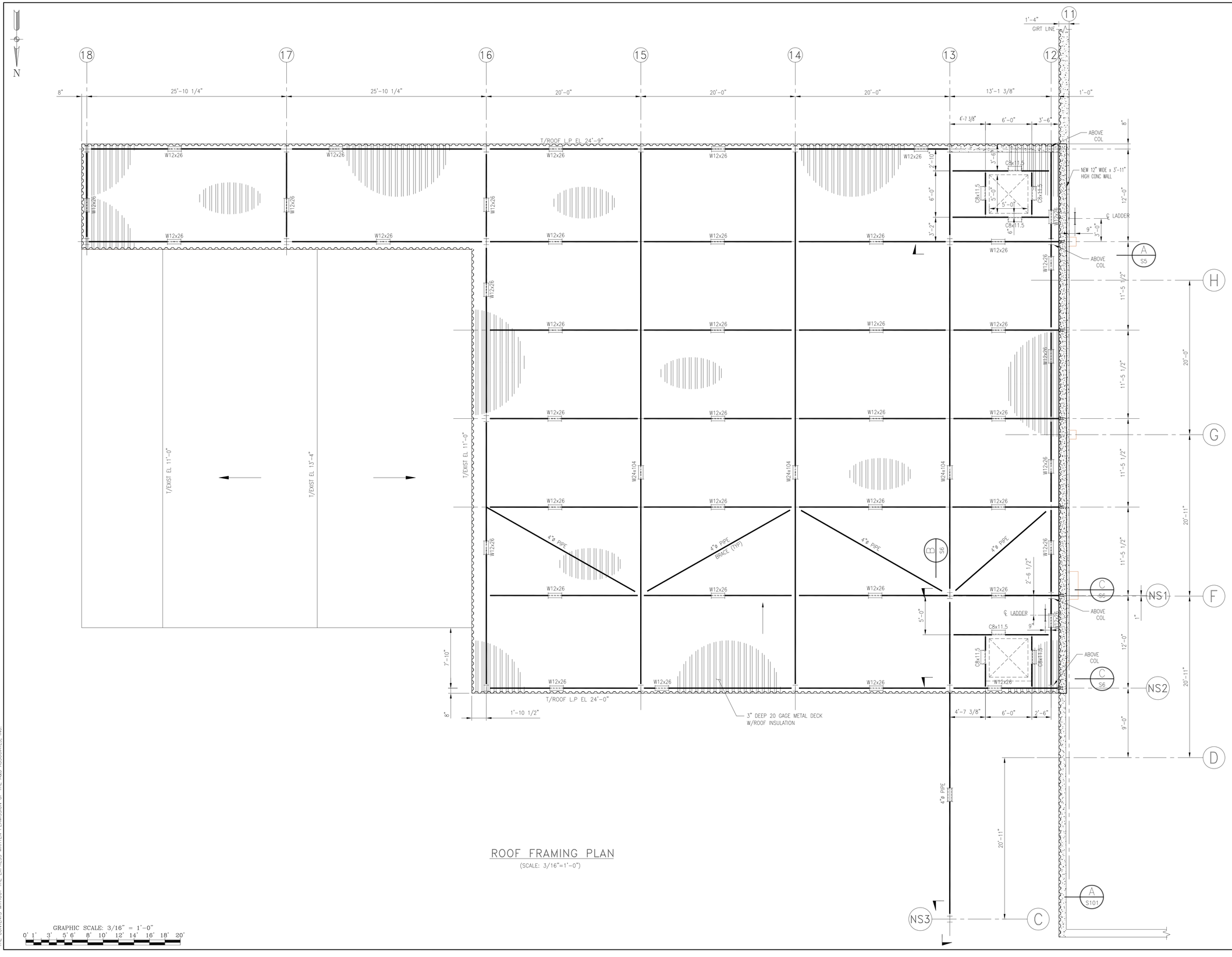
Project:

2122 S YUKON AVENUE
TULSA, OK 74107

Drawing Title:

FOUNDATION &
1st FLOOR PLAN

Date:	04.17.2022
Project No.:	XXXX
Drawn By:	RM
Scale:	1/8"=1'-0"
Drawing No.:	S-2
Page:	2 OF 6
DOB Filling No:	



ROOF FRAMING PLAN

(SCALE: 3/16"=1'-0")

GRAPHIC SCALE: 3/16" = 1'-0"

0' 1' 3' 5'6" 8' 10' 12' 14' 16' 18' 20'

OWNER:

STRUCTURAL ENGINEER:

PDM SERVICES LLC
TARPON SPRINGS
FLORIDA 34689

Seal & Signature:

MEP ENGINEER :

SITE ENGINEER :

ARCHITECTURAL ENGINEER :

GEO -TECHNICAL ENGINEER :

No.	Revision	Date	By
A	ISSUED FOR REVIEW & COMMENTS	04.18.2022	RM

Project:

2122 S YUKON AVENUE
TULSA, OK 74107

Drawing Title:

ROOF FRAMING PLAN

Date:	04.18.2022
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Drawn By:	RM
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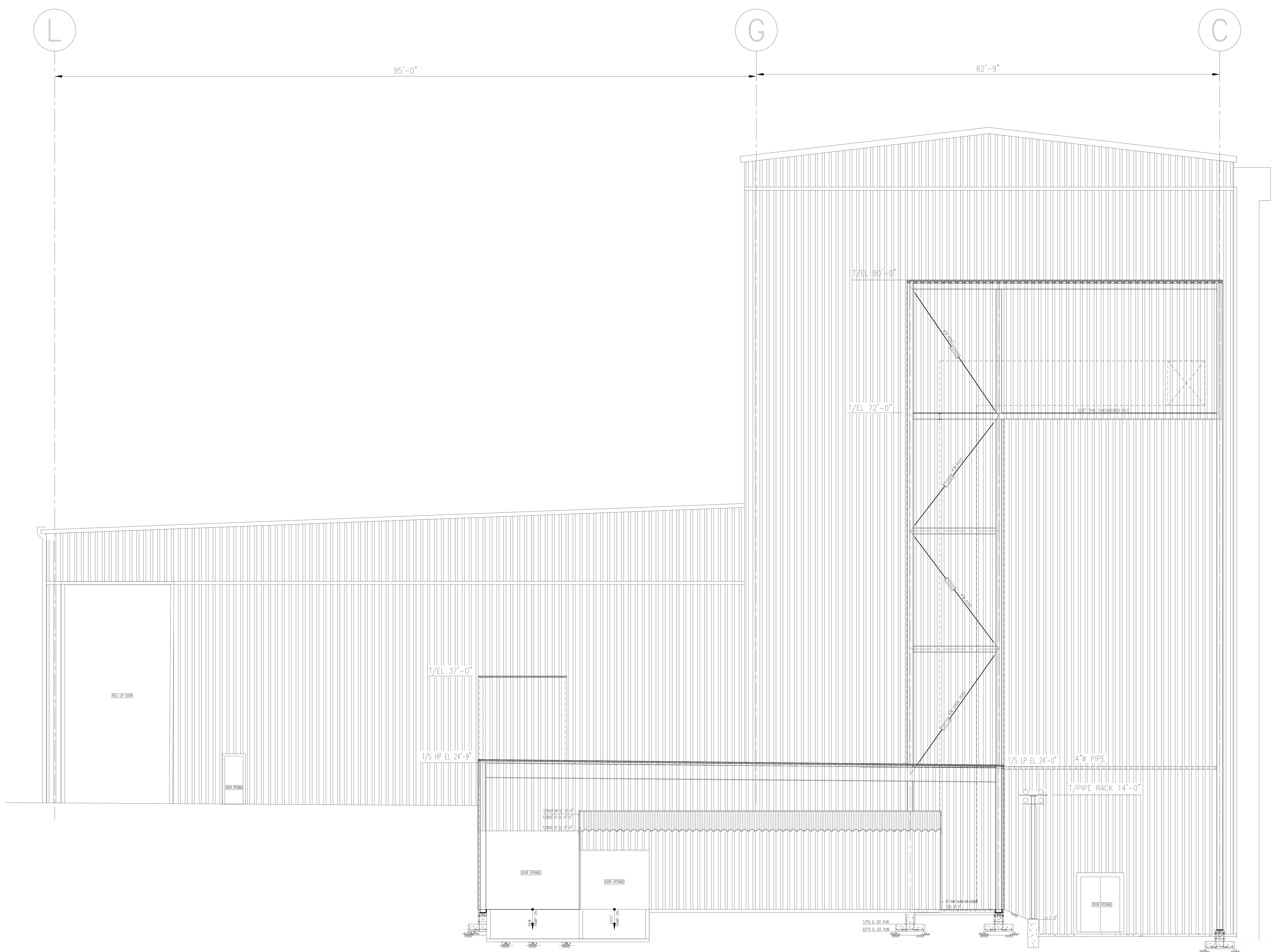
Drawing No.:	S-3
Page:	3 OF 6
DOB Filling No:	



EAST ELEVATION

(SCALE: 1/8"=1'-0")

OWNER:

STRUCTURAL ENGINEER:

PDM SERVICES LLC
TARPON SPRINGS
FLORIDA 34689

Seal & Signature:

MEP ENGINEER :

SITE ENGINEER :

ARCHITECTURAL ENGINEER :

GEO -TECHNICAL ENGINEER :

No.	Revision	Date	By
A	ISSUED FOR REVIEW & COMMENTS	04.18.2022	RM

Project:

2122 S YUKON AVENUE
TULSA, OK 74107

Drawing Title:

EAST ELEVATION

Date:	04.18.2022
Project No.:	XXXX
Drawn By:	RM
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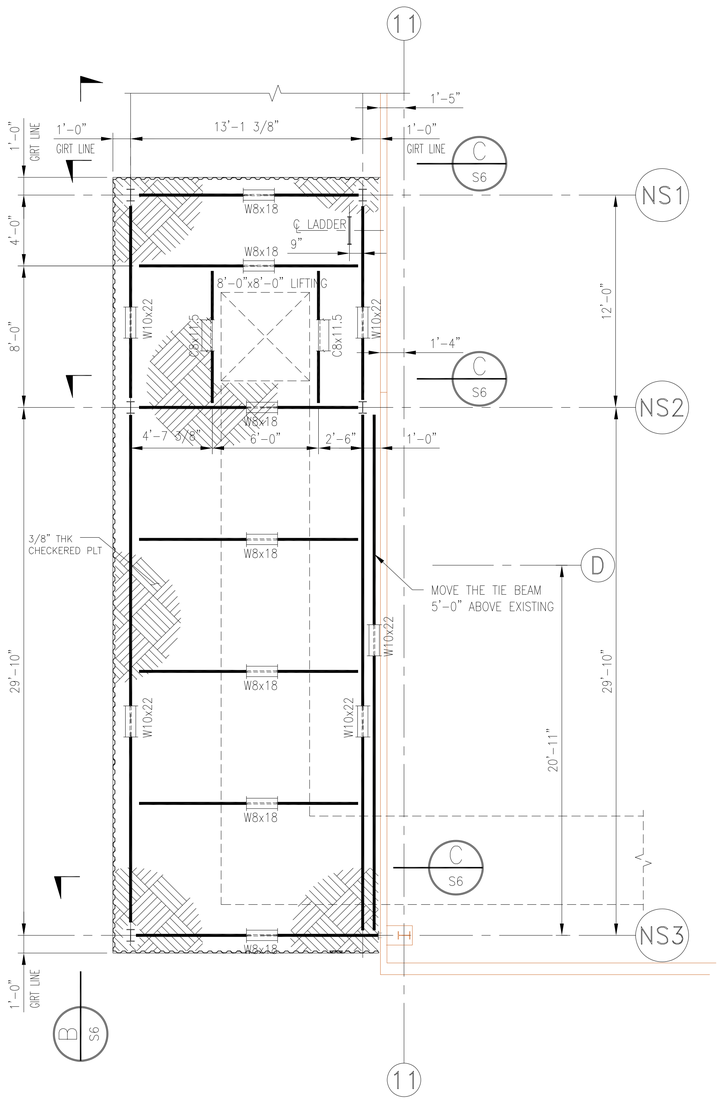
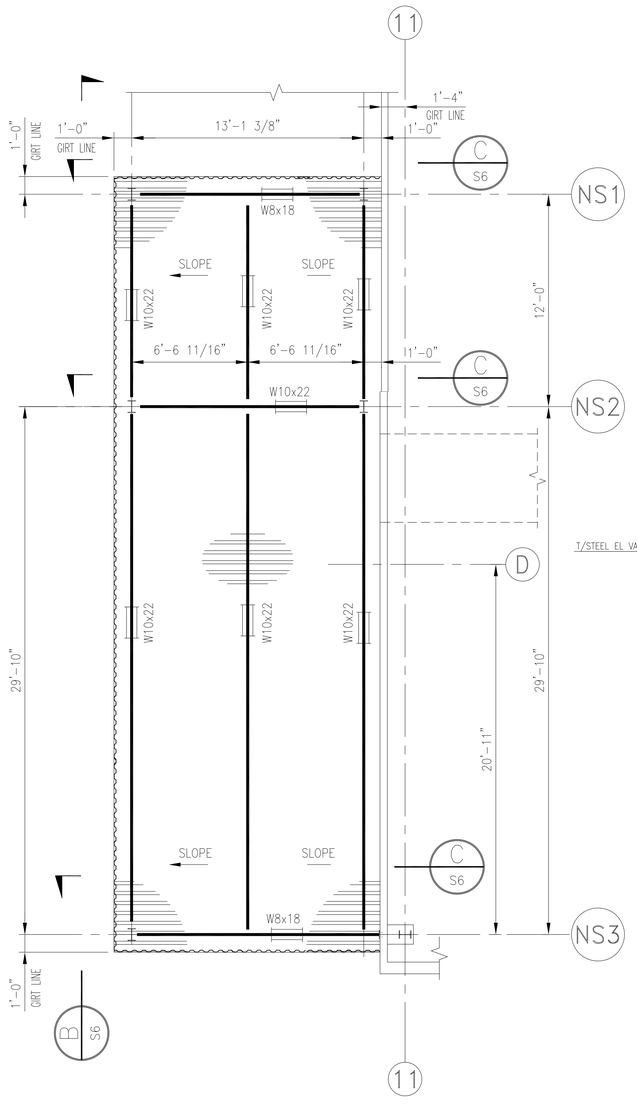
Drawing No.:	S-4
Page:	4 OF 6
DOB Filling No:	



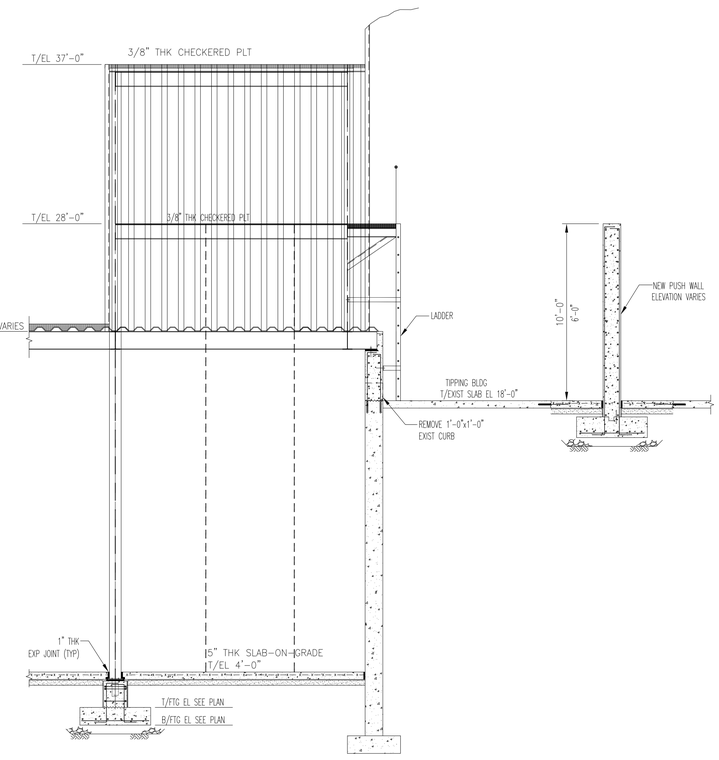
PART FRAMING PLAN @ EL 72'-0"

(SCALE: 3/16"=1'-0")



PART ROOF PLAN @ EL 90'-0"

(SCALE: 3/16"=1'-0")



SECTION A S5

(SCALE: 3/16"=1'-0") (S2&S3)

NOTES:

1. FOR GENERAL NOTES SEE DWG S1

LEGEND:

1. DENOTES BLOCK
2. DENOTES CONC
3. DENOTES PLYWOOD

GRAPHIC SCALE: 3/16" = 1'-0"

0' 1' 3' 5' 6' 8' 10' 12' 14' 16' 18' 20'

OWNER:

STRUCTURAL ENGINEER:

PDM SERVICES LLC
TARPON SPRINGS
FLORIDA 34689

Seal & Signature:

MEP ENGINEER :

SITE ENGINEER :

ARCHITECTURAL ENGINEER :

GEO -TECHNICAL ENGINEER :

No.	Revision	Date	By
A	ISSUED FOR REVIEW & COMMENTS	04.18.2022	RM

Project:

2122 S YUKON AVENUE
TULSA, OK 74107

Drawing Title:

SECTIONS & DETAILS

Date:	04.18.2022
Project No.:	XXXX
Drawn By:	RM
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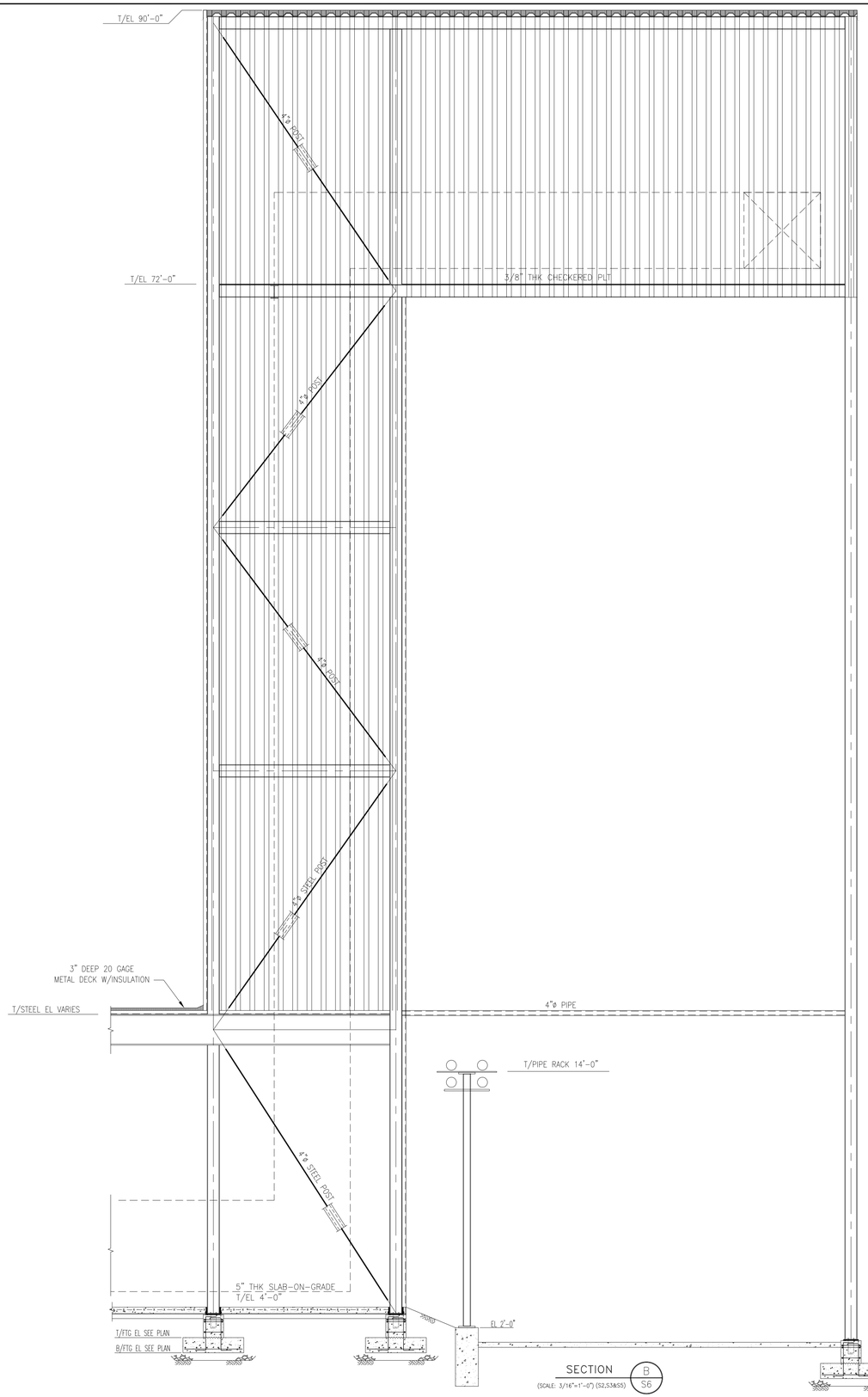
Drawing No.:	S-5
Page:	5 OF 6
DOB Filling No:	



SECTION B S6
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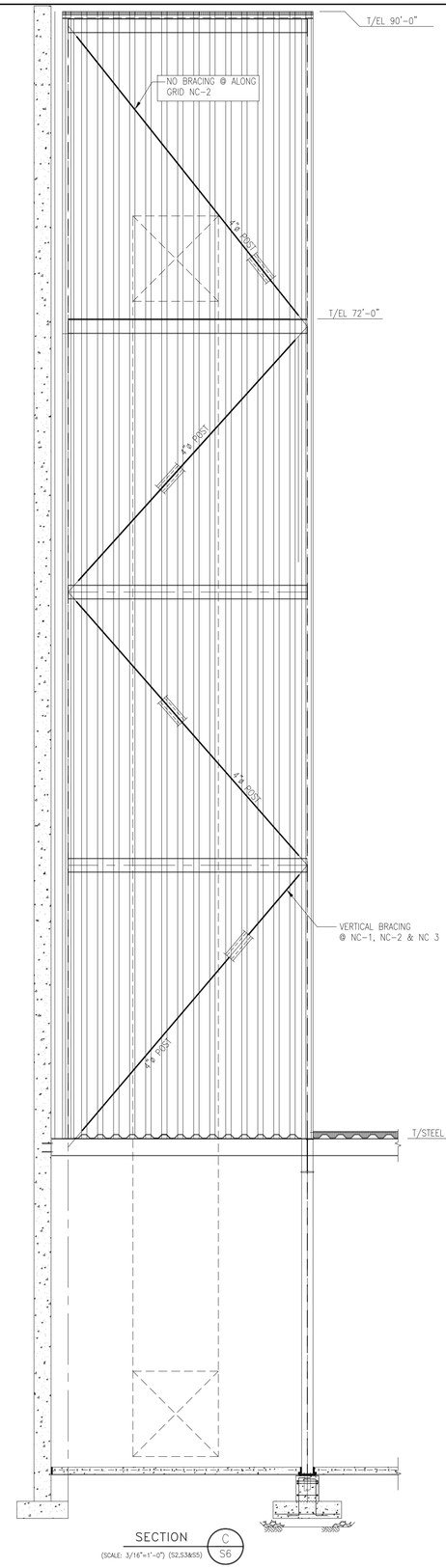

SECTION C S6
(SCALE: 3/16"=1'-0") (S2,S3&S5)

NOTES:

1. FOR GENERAL NOTES SEE DWG S1

LEGEND:

1. DENOTES BLOCK
2. DENOTES CONC
3. DENOTES PLYWOOD

GRAPHIC SCALE: 3/16" = 1'-0"
0' 1' 3' 5' 6' 8' 10' 12' 14' 16' 18' 20'

OWNER:

STRUCTURAL ENGINEER:

PDM SERVICES LLC
TARPON SPRINGS
FLORIDA 34689

Seal & Signature:

MEP ENGINEER :

SITE ENGINEER :

ARCHITECTURAL ENGINEER :

GEO -TECHNICAL ENGINEER :

No.	Revision	Date	By
A	ISSUED FOR REVIEW & COMMENTS	04.18.2022	RM

Project:

2122 S YUKON AVENUE
TULSA, OK 74107

Drawing Title:

SECTIONS & DETAILS

Date:	04.18.2022
Project No.:	XXXX
Drawn By:	RM
Scale:	3/16"=1'-0"
Drawing No.:	S-6
Page:	6 OF 6
DOB Filling No:	

COVANTA

Covanta Tulsa Renewable Energy, LLC.

WASTE EXCLUSION PLAN

October 2023

Table of Contents

FIGURES

APPENDICES

Facility Identification

Solid Waste Permit Number - 3572033

Facility Name:

Covanta Tulsa Renewable Energy, LLC. ("Covanta Tulsa" or "Facility")
2122 S. Yukon Avenue
Tulsa, OK 74107

Owner/Operator

Covanta Tulsa Renewable Energy, LLC.
2122 S. Yukon Avenue
Tulsa, OK 74107
Phone – 918.699.0011

Legal Description:
Northerly nine hundred feet (900') of the easterly one thousand eighty-five feed (1085') of NW ¼ of NE ¼ of Section 15, Township 19 North, Range 12 East, Tulsa County, Oklahoma.

Project Location
The site is located at the southwest corner of the intersection of 21st and Yukon Streets and encompasses approximately 20 acres. Site access is provided from Yukon Avenue.

Downtown Tulsa is located approximately 1.5 miles northeast of the Facility site. The Facility is located within the Tulsa City limits.

Land Use:
The site is zoned medium industrial. The area is industrialized with an oil refinery to the north, another to the southeast and several galvanizing and heavy metal fabrication facilities to the south and east and a pipeline terminal station to the west. The nearest residence is approximately ½ miles due east. An eight-lane expressway, a four-lane major thoroughfare, and six sets of railroad tracks separate the facility location and the residence.

Operations:
The Covanta Tulsa facility, formerly known as Walter B. Hall Resource Recovery Facility began commercial operation in June 1986. It includes three municipal waste combustors, each with a nominal rating of 375 tons per day of solid waste. The energy obtained from the combustion of solid waste is used to generate energy in the form of steam, electricity or both. Facility operations reduce waste volume by approximately 90 percent, thereby reducing landfill space requirements.

1.0 INTRODUCTION

The purpose of this document is to present a Waste Exclusion Plan (WEP) to be implemented at the Covanta Tulsa to detect and prevent the disposal of prohibited wastes identified in Facility permits or Chapter 252 of the Oklahoma Solid Waste regulations (OAC 252:515-29). Wastes that will not be accepted at the Facility due to regulatory, operational, safety, or environmental prohibitions are referred to in this WEP as "Excluded Waste."

As used in this WEP, ***Excluded Waste*** includes the following materials:

a) ***Prohibited Waste*** refers to waste defined in OAC 252:515-19-31, including hazardous waste1, radioactive waste, regulated polychlorinated biphenyl (PCB) waste, and asbestos.
b) ***Unacceptable Waste*** refers to waste that Covanta or ODEQ deems ineligible for disposal at the facility based on permit requirements and/or applicable law; and waste that Covanta otherwise declines to accept due to operational constraints and/or processing restrictions.

This document, developed by Covanta Tulsa, contains the procedures implemented at the Facility to ensure that all waste accepted is managed and processed in accordance with all safety, environmental and operational criteria. Additionally, the WEP specifies methods and controls for monitoring incoming waste to ensure that Excluded Waste is not received or processed at the Facility.

To ensure that incoming loads do not contain Excluded Wastes, screening procedures for conducting inspections of incoming loads are contained in the WEP. Records, including the results of these inspections, will be maintained on-site at the Facility.

During the hours when the Facility is open to accept waste, trained personnel shall be present on-site. The WEP identifies the curriculum for the training, specifies the personnel to be trained as well as outlines training documentation and refresher training requirements.

The WEP also contains procedures for addressing rejected wastes (including notification, safe storage and removal of any prohibited wastes). Procedures for proper disposal of prohibited waste and the verification of that disposal are also included as part of this WEP.

Appropriate records will be maintained in the operating record to demonstrate compliance with the requirements of Subchapter 29 (OAC 252:515-29-4). The operating record will be maintained at or near the Facility until the post-closure monitoring period (if any) is terminated (OAC 252:515-19-40).

1 Hazardous waste refers to wastes defined in 40 CFR Part 261

2.0 PLAN MODIFICATIONS

When conditions of the approved Waste Exclusion Plan (WEP) change, the Plan will be amended and submitted within 30 days to the Oklahoma Department of Environmental Quality - Land Protection Division, for approval, (since any change to the WEP is considered a Tier I permit modification requiring approval from the ODEQ (OAC 252:4-7-58(2)).

3.0 EXCLUDED WASTES

The Facility is permitted to accept municipal solid waste (MSW) and non-MSW based on current air operating permits, applicability determinations and solid waste permit requirements. Conversely, the Facility cannot accept the following categories of waste that have, for the purpose of this Plan, generally been classified as Excluded wastes. Excluded waste, as previously defined in the Introduction section, includes the following categories:

1. Prohibited wastes (categories of waste that are not acceptable based on Oklahoma regulations) and,
2. Unacceptable wastes (categories of waste that ODEQ deem ineligible for disposal at the facility based on permit requirements and/or applicable law; and waste that Covanta otherwise declines to accept due to operational constraints and/or processing restrictions.

Again, the following waste categories are prohibited wastes: hazardous waste, radioactive waste, regulated PCB waste, and asbestos, as defined in OAC 252:515-19-31.

A list of Excluded waste categories, based on permit and regulatory requirements and processing restrictions can be found in Appendix A.

Any out-of-state waste which is accepted at the facility will follow the procedures allowed under the Facility's solid waste permit and meet the requirements of the solid waste regulations.

4.0 STANDARD OPERATING PROCEDURES for WASTE ACCEPTANCE

Covanta has developed and implemented Standard Operating Procedures (SOP) for Waste Acceptance depending upon waste classification. The Standard Operating Procedures for receiving, handling and feeding MSW are specified in the Facility Environmental Compliance and Operating Manual (ECOM). Appendix B to this WEP outlines Standard Operating Procedures that are used for "Profile Waste." "Profile Waste" is an all-encompassing term for materials which are variously identified as non-MSW (common term in the Air Quality permits for the Facility), Non-Hazardous Industrial Waste (NHIW)2, Regulated Medical Waste, and Profile Waste (Covanta terminology).

The Regulated Medical Waste Processing SOP is included in **Appendix C** of the solid waste permit modification application.

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2 Non-hazardous industrial waste streams (NHIW) are categories of waste defined in Oklahoma Solid Waste Regulations that require ODEQ – Land Protection Division approval prior to being accepted for processing at the facility. These approvals are on a waste-specific and Generator-specific basis. NHIW procedures are detailed in Appendix C.

5.0 INSPECTION PROCEDURES

This section of the WEP specifies procedures for conducting screening and random inspections of incoming loads unless other steps are taken to ensure that incoming vehicles do not contain prohibited or unacceptable wastes. Section 5.1 describes general screening procedures. Section 5.2 describes random inspection procedures for MSW deliveries, while Section 5.3 outlines the inspection procedures for "Profile Wastes."

Any attempts to deliver Excluded waste will be recorded in Facility operating record. This record will include the date of attempted delivery, name of the hauler, type of vehicle, vehicle identification number, Generator, type of Excluded waste and any other relevant delivery information. A "Notice of Infraction" form, presented in Appendix D, will be completed and issued to the Hauler and/or Generator.

Repeated attempts (i.e., three (3) infractions in a 12-rolling month period) to deliver Excluded waste may lead to disbarment from the Facility, at the discretion of Facility Management. In the event that a Generator or Hauler is disbarred, Covanta will determine whether some or all of the steps will be taken by the Generator or Hauler to enable resumption of deliveries:

- The Generator or Hauler would be required to initiate a training program, content and frequency which are approved by Covanta, that educates the involved personnel as to correct the process or behavior which caused the disbarment.
- Modifying an existing training program, content and frequency which are approved by Covanta, that educates the involved personnel as to correct the process or behavior which caused the disbarment.
- Documented changes to the process of waste disposal of the Generator or Haulers operation.

These steps should enable Covanta to have the flexibility to accept a customer back after disbarment provided the customer provides satisfactory evidence that they have taken the necessary steps/precautions/training etc. to prevent a future occurrence.

In the event Excluded waste is discovered during any of the screening or inspection processes, rejection procedures described in Section 7.0 shall be followed.

5.1 Routine Visual Screening Inspections – All Incoming Deliveries

The following Covanta personnel will be responsible for conducting routine visual screening inspections on incoming loads for unusual or abnormal characteristics (for example: smoldering, uncovered, leaking, or radioactive loads):

a) Scale house Operators checks the paperwork, and the Tipping Floor personnel will visually check incoming loads;
b) Tipping Floor Personnel and Crane Operators will observe as the wastes are being off-loaded; and,
c) Crane Operators and other Facility personnel will check the condition of the waste as the waste is being directed into the refuse pit or prepared for hopper feeding.

A radiation detector is located on each side of the inbound scale. These detectors are set to screen inbound trucks for potential radioactivity. If an inbound truck alarms the radiation detectors, the procedures found in Appendix G will be followed.

In the event Covanta personnel discover any unusual or abnormal conditions that may create an emergency situation, procedures outlined in Section 7.1 will be followed. If the Scale house Operators or Tipping Floor personnel discover Excluded waste in an incoming vehicle, either at or before the waste reaches the pit area, the Driver will be directed to leave the Facility.

If the Tipping Floor personnel or the Crane Operators observe Excluded waste being discharged into the refuse pit by a Hauler, the Hauler will be held on-site until a determination is made regarding the handling of the suspect waste. If the waste is found to be Excluded waste, the Hauler will be required to remove the Excluded waste from the Facility. If the Excluded waste is identified as being a prohibited waste, procedures in Section 7.0 will be followed.

If the Excluded waste is observed in or going into the refuse pit, but the delivery vehicle exits the tipping floor before it can be stopped, the Scale house Operator will be notified, and every attempt will be made to identify and stop the vehicle before it exits the Facility. The Hauler may then be required to reload the Excluded waste if it is not prohibited. If the Excluded waste is identified as a prohibited waste, it will be handled in accordance with procedures in Section 7.0.

5.2 Random Inspections – MSW Deliveries

Random inspections will be conducted on at least 10% of all MSW inbound loads, with a minimum of at least one inspection per day when the Facility is receiving waste. An “inbound load” is defined as any delivery vehicle that is issued a scale ticket.

Presently, the Facility is not directly rail-served and thus all rail waste received at the Facility would be brought in by truck according to truck-based transportation regulations for solid waste.

Records will be maintained for inspected loads. These records are described in more detail in the paragraphs that follow and are maintained according to procedures described in Section 8.0.

Most vehicles will be inspected on a random basis; however, more frequent targeted inspections may be conducted based on a Hauler's history of violations and area of waste pick-ups. The random inspections will be performed in the following manner.

Loads selected for random inspection will be directed to a dedicated area of the tipping floor where an unloading spot will be provided. At the screening area, the load will be under the scrutiny of the Tipping Floor personnel. Haulers will be required to spread their load on the floor by dumping it into piles. If suspect waste is spotted but is not readily accessible, the Front-end Loader Operator will spread the waste tipped onto the floor. If Excluded waste is identified, the Hauler will be required to remove the waste from the Facility. If the Excluded waste is suspected to be a prohibited waste, the procedures in Section 7.0 will be followed.

After conclusion of the random inspection, acceptable waste will be charged to the pit by the Front-end Loader Operator. If no prohibited or unacceptable wastes are found, Haulers will not be required to wait long after the truck is emptied before exiting the tipping floor, unless in the reasonable judgment of Covanta employees, additional screening is warranted, in which case the Hauler will wait until this additional screening is completed.

Whenever a vehicle is randomly inspected, a "Random Waste Inspection Report" will be completed by Tipping Floor personnel or the Scale house Operator as appropriate. A copy of the "Random Waste Inspection Report" form is found in Appendix D. If there is an offense of a Facility rule, a "Notice of Infraction Report" will also be completed (as shown in Appendix D), and the vehicle identification information and date of offense will be sent to the Hauler for further action. When appropriate (e.g., for serious infractions or for repeat offenders) a letter will be sent to the Owner of the vehicle or the Waste Generator as formal notice of the infraction(s), citing the date(s), time(s), and vehicle identification number(s) and the nature of the offense(s). A copy of the "Random Waste Inspection Report(s)" will be attached to the letter, if appropriate. The letter will also notify the Owner that the Covanta will take necessary and appropriate action against Haulers as a result of the delivery of Excluded wastes to the Facility.

5.3 Inspection Procedures – Profile Wastes

Covanta Tulsa's SOP-Material Compliance (QA/QC) (included as Appendix R in the solid waste permit modification application) details the inspection procedures and documentation requirements for receiving Profile Wastes.

Screening and random individual load inspections of deliveries of profile wastes will be conducted at the Facility. Facility personnel conducting screening inspections of Profile Wastes must:

- Be familiar with each waste stream (approval paperwork) prior to receiving;
- Review and verify receiving documentation;
- Conduct on-site industrial hygiene monitoring as required by Environmental Health & Safety (EHS) Review, if necessary;
- Confirm proper labeling of load contents;
- Visually inspect received waste for discrepancies;
- Confirm proper feed method (direct hopper, AFS, or pit);
- Communicate processing instructions to appropriate Operations personnel;
- Adhere to all applicable Safety Procedures; and,
- Periodically and without announcement, thoroughly inspect individual deliveries.

During the weigh-in process, the vehicle will be screened visually for unapproved, prohibited, and/or unacceptable wastes (as described in Section 5.1 above). Trained Employees will further visually screen all waste as it is unloaded to the tipping floor, directly to the pit, or placed in the automated feed system for direct hopper feed.

Visual inspections will be performed randomly. The following documentation will accompany each load of approved waste: a Pre-shipment Notification, non-hazardous certification and appropriate shipping documents which include a Manifest or Straight Bill of Lading, Non Hazardous Certification and Pre shipment document. Alternatively, the Generator or Authorized Representative can use a Covanta Manifest which includes all the information contained in the aforementioned three documents.

The visual screening process must be completed prior to the delivery vehicle departing to prevent accidental storing of prohibited, unacceptable or unapproved wastes. A Covanta employee will be required to hold the vehicle until the entire screening process is completed. In some instances,

to avoid accidental exposure based on the Health and Safety review, the requirement to visually inspect certain types of deliveries (such as bulk powders) may be waived.

Bulk powders are mainly received from pharmaceutical, consumer and industrial applications, and are typically comprised of excipients, active ingredients or powders from the manufacturing process. Containers of bulk powders will not exceed 55 gallons in capacity and in many cases will be in bagged form. All pallets are required to be banded or shrink wrapped to minimize creating dust during unloading of the delivery truck. Due to worker exposure concerns, Covanta does not intend to inspect containers of bulk powders by any other means than a visual inspection. Each load of approved waste that arrives will be visually inspected to make sure all paperwork is complete and that the containers are labeled properly. Only materials that have been previously approved by Covanta will be accepted. All bulk powders will be processed directly into the hopper and will not be mixed either on the tipping floor or the pit with MSW.

During screening or unloading, if any discrepancies are discovered between the approval, delivery, paperwork, and/or wastes, the Facility Manager (or authorized designee) must be notified. All discrepancies will be documented using the Covanta "Profiled Waste Delivery Discrepancy Report" form found in Appendix D.

If excluded waste or unapproved waste is discovered during any of the inspection or screening processes, the handling procedures in 5.1 and 5.2 will be followed, as appropriate. Additionally, if prohibited wastes are found, rejection and notification procedures in Section 7.0 will be followed.

6.0 TRAINING

Trained Facility personnel shall be on-site during all hours the Facility is open to accept waste. All Facility personnel whose job functions involve waste receipt operations will receive a minimum of eight (8) hours initial training in waste exclusion and radioactivity, as related to the Waste Exclusion Plan. In addition, these personnel will be trained in waste handling, screening and inspection procedures. The training will be conducted by the Covanta Training and/or Environmental Department and all records will be retained in the Employee files located at the Facility.

Facility personnel will also be given initial training on the "Standard Operating Procedure for Profile Wastes." Refresher training for this SOP will be included in the annual WEP refresher training. Any changes in this SOP will be discussed during the annual WEP refresher training.

6.1 WEP Training Curriculum

At a minimum, WEP training will include review of regulatory definitions and requirements for handling of waste as well as the Facility's WEP implementation procedures.

During the initial training, all elements of the WEP will be reviewed. Regulatory requirements of OAC 252:515.29 will be reviewed. Excluded, prohibited and unacceptable waste definitions will be presented. The Waste Screening Program will be described, as well as Waste Identification and Evaluation procedures. Information regarding Procedures for Conducting Waste Inspections will be provided. Additionally, the training will include an overview of the Facility Waste Review

Procedures. Examples of the various records that are required to be maintained will be presented (e.g., Inspection Reports, Notice of Infraction Reports, Random Waste Inspection Reports, Covanta Profiled Waste Delivery Discrepancy Reports, and Initial Waste Inspection & Processing Reports). Additionally, the training will cover proper notification procedures in the event that Excluded or Rejected Waste is received. An example of the WEP Training Curriculum can be found in the form of a course outline in Appendix F. The training will include a combination of classroom training and "field" demonstration exercises, followed by a written examination (i.e., quiz).

The training will allow the responsible personnel to perform the tasks associated with the receipt of the wastes and will include recognition of prohibited (hazardous, radioactive, regulated PCBs, asbestos) and unacceptable wastes. Documentation of this training will be maintained as specified in Section 8.0 (Recordkeeping and Reporting). An example of the WEP Training sign-in sheet can be found in Appendix F.

6.2 WEP Refresher Training

Refresher training will be conducted for a minimum of four (4) hours per year. The refresher training will include summarizing the curriculum stated above, and a review of any changes made to the WEP or SOPs. Documentation of refresher training will also be maintained, as specified in Section 8.0 (Recordkeeping and Reporting).

7.0 REJECTED WASTE PROCEDURES

7.1 Emergencies

Haulers at the Facility who discover a fire in their trucks shall be diverted to the ash building away from flammable materials and vital equipment, since this building has a concrete floor and firefighting capabilities. In the event a radioactive load is discovered, the Hauler will be directed to park the truck on the access road near the cooling tower and await further instructions. Both these "holding" areas are shown on Figure 1, Facility Aerial Map.

Figure 1, Facility Aerial Map, indicates designated holding areas for: 1) hot loads (laydown area inside the ash building), and 2) radiation-detected, excluded or rejected loads (parking area on the access road, near the cooling tower).

In case of other load-related emergencies, facility personnel will assess the emergency situation and determine which designated holding area to direct the impacted load. The impacted truck will be parked in the respective holding area until it is determined that it can exit the facility. These designated holding areas are shown in Figure 1, Facility Aerial Map.

Covanta employees will call for assistance, if necessary, as per the Facility Fire and General Emergency Plan.

In the event of any incident which impairs the flow of traffic or the ability to dispose of acceptable waste at the Facility, haulers shall follow directions and instructions given by Covanta employees.

7.2 Prohibited Wastes

Prohibited wastes are defined in OAC 252:515-19-31 and include: hazardous, radioactive waste, regulated PCB waste, and asbestos. In the event that any of these wastes are discovered during inspections or processing steps, the Generator (or Authorized Representative) of the waste will be notified that the waste cannot be managed at the Facility and every attempt will be made to return the load to the Generator (or Authorized Representative). Covanta employees will utilize the following procedures to manage these types of waste until the Generator (or Authorized Representative) can arrange for proper removal from the Facility.

Additionally, if Prohibited Wastes are discovered by Covanta employees, the Environmental Specialist (or designee) will make a notification to ODEQ according to notification procedures specified in Section 7.4 below. The Environmental Specialist will also be responsible for making applicable notifications to state and local agencies as required depending upon the type of prohibited waste present in the incoming waste load (ex. Hazardous, PCB-containing, asbestos, etc.)

If “rejected waste” is detected on the tipping floor or in the pit, the following steps shall be taken:

a) The suspect object should be moved to a safe location without touching it, using the grapple, loader or poke poles.

b) The area where the waste is moved to shall be cordoned off with **DANGER** tape.

c) The Environmental Specialist, Safety Coordinator, Maintenance and Operations Manager, and Facility Manager shall be notified;

d) The Environmental Specialist shall make the proper notifications to the appropriate regulatory agencies such as ODEQ, Tulsa Department of Health, or Oklahoma Department of Labor.

e) Facility Management will contact the Hauler and/or Generator to arrange for transportation and proper management/destruction of the waste.

If “rejected wastes” are delivered with Profiled Waste, Steps a – d will be followed as described above. Then the Facility will contact the Generator or Authorized Representative to arrange for the transportation/disposition of the waste off site.

A repeat offense may result in the waste generator being barred from the Facility. A “Notice of Infraction Report” detailing the delivery of “rejected wastes” will be sent to the Generator or Authorized representative. As stated in Section 5.3, if Excluded waste or unapproved waste is discovered during any of the inspection or screening processes, the handling procedures in 5.1 and 5.2 will be followed, as appropriate. Additionally, if prohibited wastes are found, rejection and notification procedures in Section 7.0 will be followed.

The actions listed above will serve to discourage the delivery of “rejected wastes” to the Facility. Covanta will take all steps possible against any hauler and/or who knowingly or repeatedly deliver Excluded waste to the Facility.

In the event of bodily contact with “rejected wastes”, the person shall remove their clothing, shower and re-dress in clean clothing. In the event of personal injury arising from the management of “rejected wastes”, appropriate medical supervision will be sought immediately.

Appendix G includes the procedures for screening and rejecting deliveries that contain suspected radioactive waste.

The procedures for Storage of Rejected Waste and Proper Disposal are described in Section 7.5 and 7.6, respectively.

7.3 Unacceptable Wastes

Unacceptable waste refers to waste which Covanta Tulsa or ODEQ deems ineligible for disposal at the Facility based on permit requirements and/or applicable law; and waste that Covanta otherwise declines to accept due to operational constraints and/or processing restrictions. A list of Excluded waste categories, based on permit and regulatory requirements and processing restrictions can be found in Appendix A.

Covanta reserves the right to reject total or partial loads being delivered to the Facility if these loads contain unacceptable or non-processible wastes.

Unacceptable waste identified by Covanta employees will be rejected and the Hauler shall remove the waste from the Facility. The Hauler, Generator (or Authorized Representative) will be responsible for proper disposal of these unacceptable wastes. In the event that unacceptable waste (which is not prohibited) cannot be returned (e.g., large bulky items, such as water heaters, refrigerators, etc.), they will be placed in a dedicated area of the tipping floor until hauling to a properly permitted facility or other approved disposal site can be arranged by Covanta personnel.

Unacceptable loads of RMW will be returned to the customer and will not be stored on the Covanta Tulsa site.

7.4 Notification Procedures for Rejected Loads of Prohibited Wastes

The Land Protection Division of the Oklahoma Department of Environmental Quality shall be notified by the end of the next working day of any of either of the following: (A) any waste identified and rejected prior to receipt as a prohibited waste; or (B) any load identified and rejected at the gate, or identified and rejected during random inspections, as a prohibited waste. An example ODEQ notification can be found in Appendix E.

7.5 Storage of Rejected Waste

Wastes other than RMW: In the event that rejected wastes require temporary storage at the Facility, it will either be stored in a dedicated area of the tipping floor or in a holding area away from operations or vital equipment either: a) in the ash building (which is an enclosed structure) or b) on the access road to the cooling tower out of the way of Facility traffic. For wastes that do not pose a threat to human health and the environment, personnel will cordon off an area of the tipping floor and place the rejected wastes there until the Generator (or Authorized Representative) or Hauler can arrange for proper disposal. Conversely, Facility personnel will determine whether the rejected waste is required to be stored in the enclosed holding area (ash

building) or on the access road to the cooling tower. The truck will be parked in the respective holding areas until it is determined that it can exit the Facility. These designated holding areas are shown in Figure 1, Facility Aerial Map.

RMW wastes: In the event an RMW load is rejected subsequent to its delivery to the Tulsa Facility, the rejected RMW must be stored in accordance with the applicable storage requirements and must be returned to the customer within 96 hours or shipped to a facility permitted for the rejected RMW waste-type.

7.6 Proper Disposal

Waste that is subsequently rejected in accordance with WEP procedures shall be removed by those persons who transported such waste into the Facility. When waste is rejected, the Generator (or Authorized Representative) will be notified. Covanta will not verify proper disposal of prohibited wastes that are returned to the Generator (or Authorized Representative).

Covanta will make every attempt to return rejected waste to the Hauler, or Generator (or Authorized Representative). In the unlikely event that rejected waste cannot be returned, these wastes will be placed in temporary storage until hauling to a properly permitted facility or another approved disposal site can be arranged by Covanta. In the event that prohibited wastes require disposal, the Environmental Specialist will contact the appropriate regulatory agencies and make arrangements to ensure that these prohibited wastes are disposed at facilities permitted to accept such wastes. For prohibited wastes that Covanta arranges disposal, verification of proper disposal will be completed by retaining manifests, bill of ladings or other shipping and receiving facility paperwork and maintaining this documentation on file at the facility.

8.0 RECORDKEEPING

8.1 WEP Inspection Records

Records of routine visual screenings, formal random inspections and “Other Waste” Inspections performed, and the results of these inspections will be maintained in a file at the facility. Examples of these inspection forms can be found in Appendix D.

8.2 MSW Records

For MSW processing, Covanta will maintain copies of original signed (by Hauler) waste receipts (scale tickets) for all acceptable waste entering the Facility. Receipts will be stored electronically for seven (7) years as mandated by the Internal Revenue Service (IRS). In addition, supporting documentation associated with certain waste types (i.e. special waste) such as manifest, etc. will be stored with the waste receipt copy, in the same manner, for a period of seven (7) years.

Daily tonnage reports will be maintained by the Facility and can be provided upon request.

Additionally, the Facility will maintain records relating to waste receipt, as specified in the Air Operating Permit No. 2014-1722-TVR (M-1).

8.3 Records for Profiled Waste

Except for MSW, all records regarding waste profiled for acceptance at the Facility (including but not limited to non-MSW, NHIW, RMW, or other Profiled waste) will be maintained in the operating record on-site at the Facility, and will include the following:

1. Covanta waste disposal request approval package documentation, as presented and described in Appendix B, as applicable.

2. ODEQ NHIW documentation, as described in Appendix C and as applicable.

Any Generator of NHIW may petition the ODEQ to exclude a specific NHIW from the requirements of OAC 252:515-31-3 upon demonstration that the NHIW is: (1) insoluble in water, chemically inactive, and will not leach contaminants; or (2) is commonly found as a significant percentage of residential solid waste. Please note that although a Generator (or Authorized Representative) may request that a NHIW be excluded from the ODEQ certification requirements, Covanta will still conduct a review to ensure that the waste would still be acceptable for processing based on operational requirements.

8.4 WEP Training Documentation

Initial eight (8) hour training and annual four (4) hour refresher training documentation will be maintained at the Facility. This documentation will serve as the demonstration that employees have been trained and will be retained on-site at the Facility.

9.0 REPORTING

Monthly NHIW reports will be submitted to the Land Protection Division of the Oklahoma DEQ on ODEQ Form No. 520-821R, and will include the following information: date, generator name, waste name, application number and amount disposed during the month. The monthly NHIW report will include, at a minimum, information from Generators (or Authorized Representatives) who dispose of more than ten cubic yards of NHIW per month. These reports will be submitted no later than the last day of the month following the reporting period. An example copy of the Monthly NHIW Report can be found in Appendix H.

Figure 1 – Facility Aerial Map

Appendix A
Excluded Wastes

Definitions
List

Definitions

a) ***Prohibited wastes*** are defined in OAC 252:515-19-31 and include: hazardous, radioactive, regulated PCB waste, certain non-hazardous industrial wastes (NHIW) and asbestos;
b) ***Hazardous waste*** means those wastes as defined in 40 CFR Part 261;
c) ***Certain Non-Hazardous Wastes,*** deemed by ODEQ as ineligible for disposal at the facility based on permit requirements and/or applicable law;
d) ***Non-processible waste*** refers to waste which Covanta Tulsa determines is unacceptable for processing primary due to health and safety concerns, operational constraints or processing restrictions;
e) ***Unacceptable waste*** refers to waste that Covanta Tulsa or ODEQ deems ineligible for disposal at the Facility based on permit requirements and/or applicable law; and waste that Covanta Tulsa otherwise declines to accept due to health and safety concerns, operational constraints and/or processing restrictions.

List of Excluded Wastes

PROHIBITED WASTES

- Hazardous Wastes
- Regulated Polychlorinated Biphenyls (PCBs)
- Radioactive Waste
- Asbestos
- Sewage Sludge
- Off-Specification Used Oil
  (Defined as any oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities).

NON-PROCESSIBLE/UNACCEPTABLE WASTES

- Wallboard/Drywall
- Non-burnable Construction Materials
- Non-Processable Sealed Drums or Containers
- Tar/Asphalt
- Unprocessed or Whole Tires
- Oversized Bales
- Materials that Generate Excessive Dust or Aerosols
- Major Auto Parts (Batteries, Fenders, etc.)
- Other Non-Processible/Unacceptable Items
- Unapproved Non-Hazardous Industrial Wastes (NHIW)
- Human fetal tissue.
- Any type of RMW generated by or originating from an outpatient medical facility or clinic that provides abortion services.
- Large Pathological Waste which includes (for example, torsos, heads, or large animal carcasses).
- Chemotherapeutic wastes present in greater than trace quantities
- RCRA hazardous waste, EPA hazardous pharmaceuticals, universal waste, P-listed waste, aerosols, and radioactive waste are not acceptable.

The following NHIW streams (taken from Oklahoma Solid Waste Regulations, Appendix F) will not be approved or accepted by Covanta Tulsa (see Appendix B) for processing due to environmental or operational constraints:

(1) Arsenically-treated wood that meets the exemption criteria of 40 CFR 261.4(b)(9);
(2) Coal combustion ash per 40 CFR 261.4(b)(4);
(3) Incinerator ash;
(4) Sanitary sewage;
(5) Lighting fixture ballasts containing non-TSCA regulated PCBs per 40 CFR Part 761;
(6) Refractory & foundry sands and slag, retort, fly ash, cement kiln dust;
(7) Wastes exempted by the RCRA Bevill waste exclusion in 40 CFR 261.4(b)(7);

(8) Wastes rendered non-hazardous that were formerly hazardous pursuant to 40 CFR 261, Subpart C;
(9) Unknowns;
(10) Wastes from metal plating processes.

Additionally, dedicated loads of solid waste that is “conditionally exempt” from regulation as hazardous waste pursuant to 40 C.F.R. 261.5 will not be approved or accepted by Covanta Tulsa (see Appendix B) for processing at the Tulsa facility.

Appendix B

Standard Operating Procedures – Profile Wastes

1.0 Introduction

This Standard Operating Procedure describes administrative procedures associated with the review and approval of "Profile Wastes" not classified as MSW, (for example, non-MSW, RMW and NHIW), and procedures for receiving and handling these approved "other wastes."

The process starts when a Generator or Authorized Representative initiates a request to potentially process their waste(s) at the Covanta Tulsa facility. A Covanta representative will provide standard paperwork (i.e., waste profile package) to the Generator (or Authorized Representative) for completion and submittal. Once the waste profile package is received by Covanta Tulsa, a review of technical completeness commences.

After the review of technical completeness, waste profiles are then subject to a four-stage evaluation including: 1) environmental review, 2) safety review, 3) operations review and 4) final review. The Environmental review generally consists of a regulatory evaluation to determine the acceptability of the waste and a subsequent permit review which includes a waste composition review to establish potential impact on air emissions. Once a waste is deemed acceptable, a feed rate consistent with the criterion based on permit limits is established.

Due to Oklahoma-specific requirements of the Department of Environmental Quality – Land Protection Division, an additional step is required in the review/approval of Non-Hazardous Industrial Waste (NHIW) streams proposed for processing at Covanta. This additional step involves the submittal of NHIW Generator Certification and supporting information to the ODEQ review and approval.

If a waste is found acceptable from an environmental standpoint, the waste is then evaluated for safety from a physical characterization and handling standpoint. If the waste is found acceptable from a safety standpoint, then the application is sent to the Facility Manager (or a designated representative) for the Operations review.

The Operations review includes consideration of the pit, tipping floor and combustion management. This step in the review process also considers the effects of waste behavior within the boiler. If the disposal of a proposed waste stream will interfere with normal Facility operations, or otherwise adversely affect Facility performance, the proposed waste stream application is rejected.

Once the application is deemed acceptable by Covanta Tulsa and ODEQ, arrangements will be made for delivery of the waste to the facility according to the procedures outlined below. If the application is rejected, waste will not be acceptable at the Facility.

2.0 Waste Evaluation Procedures

The process established for the review of waste disposal requests for all wastes (except MSW) and their acceptance at Covanta Tulsa is described in this section.

The Generator or Authorized Representative must submit a Waste Disposal Request, which is comprised of a Material Characterization Form (MCF), Safety Data Sheets (SDSs) and/or analytical data or sufficient additional back-up information. Also, Generators are subject to NHIW certification requirements for Generators found in OAC 252:515-31-3. An ODEQ NHIW Generator Certification Form must be completed by each Generator (or Authorized Representative) for each NHIW included in each Waste Disposal Request.

Generators or Authorized Representatives of waste streams that include but are not limited to, confidential documents, clothing, and file records will not be required to provide SDSs or analytical testing as this data is not required or appropriate for these waste streams.

Evaluation of these Profiled Waste wastes -- non-MSW, NHIW, RMW for instance will consist of a two-step process: 1) Covanta evaluation and 2) Facility Review.

Covanta Tulsa personnel will review the information in the disposal request for the following points:

- Technical completeness
- Hazardous, prohibited or unacceptable waste
- Consistency with permits
- Consistency with federal and state regulations
- Safety considerations

The Facility Review will be conducted by the Facility Manager (or designated representative) to evaluate the disposal request to ensure that the waste adheres to environmental permit and regulatory requirements, can be handled safely, and can be processed without impacting boiler or facility operations. Additionally, the Facility Review will also verify compliance with state-specific NHIW and waste exclusion requirements. The personnel at the Facility who are responsible for the Facility Review will receive appropriate WEP training, as outlined in Section 6.0.

2.1 Technical Completeness

The Generator or Authorized Representative will submit a waste disposal request that will include standard documents and information required to initiate a review by Covanta Tulsa.

Each waste disposal request package will include the following standard documentation:

- Material Characterization Form
- Back-up information (Safety Data Sheets, product inserts or labels, analytical results, formulation sheets, process generating waste descriptions, as appropriate, etc.)
- ODEQ Non-Hazardous Industrial Waste (NHIW) Certification Form(1) (Appendix C)

For oily waste:

- Material Characterization Form
- ODEQ Non-Hazardous Industrial Waste (NHIW) Certification Form(1) (Appendix C)
- Back-up information (Safety Data Sheets, product inserts or labels, analytical results, formulation sheets, process generating waste descriptions, as appropriate, etc.)
- The back-up information will include laboratory analysis demonstrating that the oily waste meets the on-spec determination requirements of 40 CFR 279.11 as shown below.

Table 1— USED OIL NOT EXCEEDING ANY ALLOWABLE LEVEL SHOWN BELOW IS NOT SUBJECT TO THIS PART WHEN BURNED FOR ENERGY RECOVERY

Constituent/property	Allowable level
Arsenic	5 ppm maximum.
Cadmium	2 ppm maximum.
Chromium	10 ppm maximum.
Lead	100 ppm maximum.
Flash point	100 °F minimum.
Total halogens	4,000 ppm maximum.

(1) The ODEQ - Land Protection Division is requiring Covanta to seek approval from the Division for each NHIW from each Generator. The Land Protection Division will expedite a determination regarding the acceptance of NHIW at Covanta.

Covanta Tulsa will work with the Generator or Authorized Representative to ensure that the information submitted in their waste disposal request packages is complete, accurate and representative of the proposed waste stream(s).

Each waste stream that is profiled for consideration is assigned a reference number. A master list of all approved and unapproved wastes is maintained for reference at the Facility. Copies of all approved Waste Disposal Profiles, including MCFs, ODEQ NHIW Generator Certifications and supporting documentation are maintained at the Facility.

The frequency of re-characterization will be determined by Covanta Tulsa. Generator knowledge, analysis (in some cases) and a written recertification that the waste has not changed will be accepted as re-characterization.

2.2 Environmental Review

EHS personnel will evaluate information submitted with the MCFs, analytical data or SDSs, or Generator process knowledge against Facility operating permits for both air and solid waste management requirements. The information will then be compared to federal, state, and local regulatory requirements. This review will determine whether the waste will meet Facility environmental acceptance criteria.

Categories of wastes that are not acceptable or cannot be knowingly processed at Covanta Tulsa are found in Appendix A of the Waste Exclusion Plan.

Additionally, the EHS Representative will include an evaluation of the following Oklahoma-specific requirements based on the following concepts:

- Understanding of the regulations and procedures for NHIW acceptance and exclusion;
- The definition of NHIW (OAC 252:515)
- Waste identification and evaluation including:
- Identification of hazardous waste regulated polychlorinated biphenyls (PCBs) wastes, radioactive or wastes not permitted for Covanta.
- Basic understanding of hazardous wastes and exclusions
- Basic understanding of chemistry related to the physical characteristics of wastes;
- Methods of identifying containers and labels typical of hazardous, radioactive, PCB, and asbestos wastes.

During this step in the evaluation process, EHS personnel will submit the required information to the Facility. The Facility will review all submitted material and forward it to the ODEQ – Land Protection Division for their review and approval. The procedures for individual NHIW submittal to the ODEQ – Land Protection Division are provided in Appendix C.

As a result of the environmental review, specific processing requirements and handling precautions are specified to assure environmental requirements and operating parameters are met.

2.3 Health and Safety Review

EHS personnel will review the Waste Disposal Request package to determine if the waste can be handled with no adverse health effects on Facility personnel. Standards established by Occupational Safety and Health Administration (OSHA), American Conference of Governmental Industrial Hygienists, Inc. (ACGIH) and other recognized industrial hygiene and occupational health organizations are used in the Health and Safety (H&S) evaluation. During the H&S evaluation, specific processing requirements, handling precautions, personal protective equipment (PPE) and industrial hygiene (IH) monitoring requirements are specified to ensure worker and public safety.

2.4 Operations Review

The Facility Manager (or designated representative) will review the Waste Disposal Request package to determine if the waste can physically be processed at Covanta. This review focuses on the logistics and mechanics of safe processing for the boilers and floor operations.

Additionally, the Facility Manager may assign the Environmental Specialist (or an alternate designee) to review the Waste Disposal Request package to ensure that the state-specific requirements have been satisfied regarding NHIW certification and Waste Exclusion evaluation.

2.5 Final Review

After the Facility Manager or authorized designee reviews the Waste Disposal Request package and makes a determination of the acceptability of the waste stream based on the Environmental, Safety and Operations review and based on the facility's capabilities and service agreements, the request package is sent back to Covanta for Final approval or rejection.

Covanta personnel will send an approval letter to the Generator or Authorized Representative including any specific acceptance conditions, if appropriate for approved waste streams. Conversely, for those waste disposal requests that are rejected at any point during the review process, Covanta will send a formal Rejection Letter to the Generator or Authorized Representative stating the reasons for such rejection.

A copy of each approved Waste Disposal Request package will be maintained on-site. The original request package, contract, required notices and associated records are maintained by Covanta.

3.0 Waste Shipment Notification and Manifest Tracking

When a Generator or Authorized Representative is ready to ship a load of waste, they will notify Covanta Tulsa using a Pre-shipment Notification form. The Generator or Authorized Representative must include their distinct approval number and waste description on all shipping documents. When the load arrives at the Facility, the approval number and manifest form are matched against the actual load and waste.

4.0 Delivery, Handling and Processing Procedures

When a delivery is scheduled, the Facility Profiled Waste (SW) Coordinator (or designee) will distribute information to the Facility staff appropriately that a Profiled Waste delivery has been scheduled. This notification will include the following information:

- Delivery Date and Time
- Approval Number
- Name of the Generator or Authorized Representative
- Type of Waste to be delivered
- Feed Method (hopper or pit or automated feed system) and Feed Ratio or Rate (lbs. of waste/time)

When a Profiled Waste load arrives at the scale house, the Scale house Operator notifies the Facility SW Coordinator (or designee). The Facility SW Coordinator (or designee) meets the vehicle on the tipping floor, or at the appropriate boiler building entrance depending on whether the waste stream is to be pit or hopper fed. The Facility SW Coordinator (or designee) screens the load (spot checking containers/load to confirm only pre-approved waste has been delivered), the transfer of the waste to the appropriate feed area (hopper or pit or automated feed system), and the feeding of the waste to the combustor(s) at the appropriate feed rate or ratio.

All waste is to be handled and processed in accordance with the instructions outlined in the corresponding approval package. These instructions may include:

- Selected feed rates and mixing ratios.
- Inventory lists or matrixes of approved and rejected waste.
- Wastes which must be hopper fed, AFS, and/or pit fed.

- Any Health and Safety requirements (required personal protective equipment, industrial hygiene monitoring, specific handling instruction etc).

Waste streams shall be processed in the manner specified in the approval package. During combustion of any Profiled Waste, information will be provided to the Control Room Operator so that he/she can monitor the continuous emission monitoring system and pollution control equipment functions. At the first sign of increased emissions, the Control Room Operator should notify the Crane Operator to stop feeding the waste stream and adjust operations accordingly.

5.0 Documentation and Recordkeeping

The following documentation is maintained as part of the waste approval package:

a. Profiled Waste Request Form
b. Profiled Waste Letter of Approval
c. Material Characterization Form
d. Profiled Waste Classification of Materials
e. Profiled Waste Back-Up Documentation
   Examples – SDS, analytical results, technical/toxicological data etc.
f. Profiled Waste Protocols

The Scale house Operator will collect a Non-Hazardous Certification for each delivery.

After a portion of the waste stream has been introduced into the boiler for the first time, the Facility SW Coordinator (or designee) must complete an Initial Waste Inspection and Initial Waste Stream Review Form when requested. An example of this form can be found in Appendix D. This form should be submitted to the Facility Manager or designee and filed with the waste approval file. Any complications in the waste stream processing should be communicated to the Facility Manager who will communicate the findings to the Generator or Authorized Representative.

Profiled Waste Forms, including all supporting documentation such as laboratory analytical data, will be kept on site for a minimum of three years.

Appendix C

ODEQ Non-Hazardous Industrial Waste Certification Procedures and NHIW Generator Certification Form

Non-hazardous industrial waste streams (NHIW) are categories of waste defined at 27A O.S. § 2-10-103 and listed in OAC 252:515-31 (Solid Waste Regulations). Each NHIW from each Generator will require an individual ODEQ – Land Protection Division approval prior to being accepted for processing at Covanta Tulsa.

Examples of NHIW are listed in Appendix F of OAC 252:515-31, and this list is provided below. Some of these NHIW categories have been rejected by Covanta Tulsa from processing due to environmental and/or operational processing concerns. These unacceptable categories have also been listed in Appendix A of the Facility Waste Exclusion Plan and are also shown in text that has been stricken out below.

1. Air pollution control equipment residues
2. ~~Arsenically-treated wood that meets the exemption criteria of 40 CFR 261.4(b)(9);~~
3. Auto shredder fluff;
4. Blasting media and other abrasives used to remove surface coatings;
5. ~~Coal combustion ash per 40 CFR 261.4(b)(4);~~
6. Combustible materials as defined in 49 CFR 173.120 and 173.124, that are not regulated as hazardous wastes;
7. Containers which are RCRA empty in accordance with 40 CFR 261.7, or empty containers which have held pesticides (i.e., herbicides, fungicides, or rodenticides);
8. Cooling tower waters and other cooling process related wastes;
9. ~~Incinerator ash;~~
10. Industrial sludges and industrial mud trap residues;
11. Industrial wastewater treatment plant sludge (excluding sludge that is exclusively ~~sanitary sewage~~);
12. Ink wastes;
13. Lab-related wastes, including lab packs *(except for reagent grade lab chemicals or reagent grade lab packs)*;
14. ~~Lighting fixture ballasts containing non-TSCA regulated PCBs per 40 CFR Part 761;~~
15. Miscellaneous chemical spill residue, primarily non-fuel related;
16. Municipal and non-industrial wastewater treatment plant sludges
17. Non-hazardous pesticides (i.e., herbicides, fungicides, & rodenticides) *(except for FIFRA-regulated waste)*;
18. Oil filters meeting the requirements of 40 CFR 261.4(b)(13);
19. Outdated and off-specification products;
20. Outdated, off-specification, or mislabeled over-the-counter medicines, which are not hazardous in accordance with 40 CFR 261, Subparts C or D;
21. Paint waste and related solvents;
22. Petroleum contaminated soil and debris, oily rags and absorbents with > 1000 ppm TPH;
23. Pharmaceutical waste not identified in (20);
24. ~~Refractory & foundry sands and slag, retort, fly ash, cement kiln dust;~~
25. Resins, polymers, and adhesives;
26. Sludges containing materials washed from the interior of bulk materials carriers such as tank trucks or railroad tank cars;
27. ~~Wastes exempted by the RCRA Bevill waste exclusion in 40 CFR 261.4(b)(7);~~
28. ~~Wastes rendered non-hazardous that were formerly hazardous pursuant to 40 CFR 261, Subpart C;~~
29. ~~Unknowns;~~

30. ~~Wastes from metal plating processes.~~

All other waste types on the list will be considered for processing at Covanta Tulsa, provided ODEQ review and approval procedures are followed. For each NHIW to be disposed in an Oklahoma solid waste disposal facility, Generators, or persons identified in 27A O.S. § 2-10-501(H)(1), shall submit a certification to the ODEQ – Land Protection Division that the NHIW is not a hazardous waste. The certification shall be made in accordance with the ODEQ NHIW Generator Certification form or contain equivalent information. A copy of the ODEQ form and instructions are provided in this Appendix.

In the event the NHIW generating process or resultant waste stream changes, the Generator shall immediately notify the ODEQ of such change and update the appropriate certification. The ODEQ may require the Generator to provide documentation in support of the certification. Such documentation may include, but not be limited to, laboratory analysis, material safety data sheets, or additional information regarding the waste stream or generation process.

The ODEQ NHIW provisions do not relieve a Generator from the requirements of 40 CFR 262.11 or any other State or Federal laws, rules, or regulations.

Any Generator of NHIW may petition the DEQ to exclude a specific NHIW from the requirements of OAC 252:515-31-3 upon demonstration the NHIW is: (1) insoluble in water, chemically inactive, and will not leach contaminants; or (2) is commonly found as a significant percentage of residential solid waste.

After the NHIW Generator Certification is submitted to the ODEQ, the Land Protection Division will expedite a determination on the approval or rejection of the wastes stream.

Copies of approved and rejected NHIW certifications will be maintained at the Facility as part of the waste disposal request paperwork.

NHIW CERTIFICATION

OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Please read instructions prior to completing this form.

Generator Name:_____

Mailing Address:_____ City _____ State ____ Zip _____

Point of Generation
Address: _____ City _____ State ____ Zip _____

Generator Contact: _____ Title _____ Telephone _____

DETAILED WASTE DESCRIPTION

Waste Name:_____

If waste was generated out-of-state, is it classified as hazardous in the state of origin? [] Yes [] No [] NA- Okla. waste

Approximate amount of waste to be disposed:		Disposal frequency:		Physical characteristics:	
_____	[] Tons	[] Pounds	[] One-time [] Weekly	[] Solid	[] Liquid
	[] Cubic yards	[] Drum	[] Monthly [] Annually	[] Sludge	[] Combination
	[] Other _____				

Method used to determine waste is non-hazardous: [] Analysis [] Generator knowledge [] Both

Process generating waste (be specific and use additional sheets if necessary):

_____

_____

_____

_____

_____

DESIGNATED RECEIVING LANDFILL

Name: _____ Permit #: _____

GENERATOR CERTIFICATION

I understand this form must be signed by the original waste generator or other persons authorized by 27A O.S. §2-10-501(H).

To the best of my knowledge, I certify:

- The information contained herein is accurate, complete, and representative of the waste to be disposed;
- The waste identified above is not a characteristically hazardous waste as identified by 40 CFR 261, Subpart C, is not a listed hazardous waste as identified by 40 CFR 261, Subpart D or contaminated with a listed hazardous waste, and is not otherwise identified as a hazardous waste by the Department of Environmental Quality; and
- This waste will be managed in accordance with all applicable statutes and rules of the Department of Environmental Quality.

_____
Generator Signature

_____
Printed name Title Date

Adopted June 2003 DEQ Form # 515-860

INSTRUCTIONS FOR COMPLETING THE NHIW CERTIFICATION

Enter the name of the generating facility, generator mailing address, address where the waste was generated, contact name and title of person at the generating facility who is knowledgeable about the waste, and phone number.

DETAILED WASTE DESCRIPTION

1. Identify the name of the waste.
2. Identify the approximate amount of waste to be disposed under the plan, its frequency of disposal, and its physical characteristics.
3. Identify if the waste was determined to be non-hazardous by either knowledge of process, testing, or both. If requested by DEQ, the generator must be able to provide information about the waste, such as a list of chemical constituents entering into the waste and a list of chemical constituents likely to be in the waste, laboratory analyses, MSDS sheets, and other information used by the generator to determine the waste is non-hazardous.
4. Identify the process generating the waste. Please note that the waste generating description must be specific and sufficient to demonstrate the waste is non-hazardous.

DESIGNATED RECEIVING LANDFILL

Identify the name of the landfill to receive the waste and its DEQ permit number.

GENERATOR CERTIFICATION

Read the certification and sign and date the form. **Please note that the certification may only be dated and signed by one of the following:** 1) the original waste generator; 2) a person who identifies and is under contract with a generator and whose activities under the contract cause the waste to be generated; 3) a party to a remediation project under an order of the DEQ or under the auspices of the Oklahoma Energy Resources Board or other agencies of other states; or 4) a person responding to an environmental emergency.

The completed notification form should be submitted to the DEQ at the following address. Once submitted, the generator may dispose of the waste at the designated landfill.

Department of Environmental Quality
Solid Waste Compliance Unit
P. O. Box 1677
Oklahoma City, OK 73102
Phone (405) 702-5100
Fax (405) 702-5101

Appendix D

Inspection Report Forms

Notice of Infraction Report
Random Waste Inspection Report
Covanta Profiled Waste Delivery Discrepancy Report
Initial Waste Inspection and Processing Report

2122 SOUTH YUKON AVENUE
TULSA, OK 74107
(918)-699-0011
(918)-699-0017 Fax

NOTICE OF INFRACTION REPORT

FROM: Covanta TRE, LLC.
TO: _____
DATE: _____

The following vehicle has been found in violation of the Covanta Tulsa Renewable Energy Resource Recovery Facility's Rules and Regulations as documented below.

Vehicle Identification No:_____ Driver:_____

Date of Infraction:_____ Time of Infraction:_____

Nature of Infraction:

[ ] Attempted to Deliver Excluded Waste
[ ] Infraction of Facility Rules and Regulations (per details below)
[]Other
(Summarize):_____
_____
_____
_____

Generator Name and Address (if known):
_____
_____
_____
_____

Record of Infractions:
[ ] First Infraction Date:_____
[ ] Second Infraction Date:_____
[ ] Third Infraction Date:_____

Penalty:
[ ] Rejection of Load
[ ] Excluded Waste Reloaded - Rejection of Partial Load
[ ] Rerouted (Specify)
[ ] Disposition of Excluded Waste (Describe)

Name/Title:_____
Signature:_____Date:_____

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2122 SOUTH YUKON AVENUE
TULSA, OK 74107
(918)-699-0011
(918)-699-0017 Fax

RANDOM WASTE INSPECTION REPORT

WASTE HAULER COMPANY:_____**DATE:**_____

DRIVER'S SIGNATURE_____**DATE:**_____

TRUCK #:_____ GROSS WEIGHT (TONS): _____

CONTAINER #: _____SCALE TICKET #:_____

A. [ ] Acceptable Waste (DO NOT Complete Parts C, D, E)

B. Type of Vehicle

[ ] Drop Box
[ ] Front End Loader
[ ] Other (describe)

[ ] Tandem
[ ] Rear Packer
[ ] Transfer Vehicle

C. Type of Excluded Wastes (check all below that apply):

[ ] Prohibited	**[ ] Unacceptable**	**[ ] Non-Processible**
[ ] Hazardous	List from Appendix A:	Describe:_____
[ ] Regulated PCB	_____	
[ ] Regulated Medical	_____	
[ ] Radioactive	_____	
[ ] Asbestos		
[ ] Other (describe)_____		

D. Description of Excluded Waste(s)

[ ] Identifying Marks (specify) _____
[ ] Number/Quantity of Items _____
[ ] Description of Wastes (Document with Photos if appropriate)
_____

E. Disposition of Excluded Waste:

[ ] Returned to vehicle
[ ] Isolated and monitored for removal by hauler
[ ] Other (describe)_____

F. Inspector Name: _____Date:_____Time:_____

Signature:_____

Other personnel:_____

G. Office Use - File No.:_____

PROFILED WASTE DELIVERY DISCREPANCY REPORT

Date of Delivery:

Facility:

Broker/Generator:

Approval Number(s):

Material Name(s):

Type of Discrepancy (check appropriate box(es))
☐ Improperly loaded vehicle
☐ Bill of Lading and approval discrepancy
☐ Waste delivered not on bill of lading
Was waste listed on approval package? Yes ☐ No ☐
☐ Bulk material did not match description provided
☐ Unidentified material in the load
☐ Attempted delivery of hazardous waste
☐ Attempted delivery of a rejected waste
☐ Other Describe:

Load Resolution (check one)

☐ Accepted and processed entire load
☐ Accepted partial load
☐ Reject entire load

Was the client contacted? Yes ☐ No ☐
If so, whom?

Recommendations/Comments:

COVANTA Customer Service Resolution:

Health and Safety
☐ All applicable Health and Safety procedures were followed during the processing of this Profiled Waste.

Reported By:

Please email this completed form to the COVANTA Customer Service Representative that scheduled this delivery. If this delivery was scheduled directly by the customer please forward this completed form to the Manager, Customer Service. The appropriate Customer Service Representative will note the resolution and email this form back to you.

WBH APPROVAL No. 07WBH_____
WBH MANIFEST No. 07MAN_____

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TULSA, OK 74107
(918)-699-0011
(918)-699-0017 Fax

INITIAL WASTE INSPECTION AND PROCESS REPORT

DATE: _____ **TIME:** _____

Scale Ticket Receipt Number _____ WBH Approval Number: _____

Weight of waste: _____

Manifest, Trailer, Seal and /or Other Load Identity Numbers: _____

_____

Generator: _____

Hauler (Company & Driver's Name):_____

Waste Description: _____

Immediate Disposition of Waste:_____

List equipment used to off-load and process waste: _____

_____

WBH Personnel involved in off-load:

NAME	TOTAL TIME SPENT ASSISTING	Straight or O.T.
_____	_____	_____
_____	_____	_____
_____	_____	_____

Comments (include any waste or procedure discrepancies):_____

_____

_____

List any problems related to processing the waste stream (ex. Environmental, operational, etc.):_____

Signature: _____

Title:_____

Appendix E
ODEQ Notification Form

The Land Protection Division of the Oklahoma Department of Environmental Quality shall be notified by the end of the next working day of any of either of the following: (A) any waste identified and rejected prior to receipt as a prohibited waste; or (B) any load identified and rejected at the gate, or identified and rejected during random inspections, as a prohibited waste.

A copy of an example notification form is provided on the following page.

COVANTA
Powering Today. Protecting Tomorrow.
2122 SOUTH YUKON AVENUE
TULSA, OK 74107
(918)-699-0011
(918)-699-0017 Fax

ODEQ NOTIFICATION OF REJECTED PROHIBITED WASTE

DATE of REJECTION: _____

TIME of REJECTION: _____

REASON FOR REJECTION (check all that apply):

[ ] Hazardous
[ ] Regulated PCB
[ ] Regulated Medical
[ ] Radioactive
[ ] Asbestos
[ ] Other (describe)

_____
_____
_____
_____

WASTE GENERATOR INFORMATION:

Name of Generator:_____
Address:_____
Telephone number:_____
Contact person name: _____

HAULER INFORMATION:

Name of Driver:_____
Tag number of the vehicle:_____
Carrier name:_____
Address:_____
Telephone number:_____
Contact person name:_____

ODEQ NOTIFICATION INFORMATION:

Name of Covanta Tulsa personnel making notification: _____
Title: _____
Signature: _____

Appendix F

WEP Training

WASTE EXCLUSION PLAN TRAINING
CIRRUCULIM

I. Introduction

II. Regulatory Requirements OAC 252:515.29

III. Waste Definitions

IV. Covanta Waste Screening Program

V. Covanta Waste Identification and Evaluation

VI. Procedures for Conducting Waste Inspections

VII. Waste Review Procedure

VIII. Recordkeeping and Reporting Requirements

IX. Notifications for Rejected Waste

X. Field Exercise – Conduct Waste Inspection

XI. WEP Training Quiz and Course Evaluation

Covanta Tulsa
Training Sign-in Sheet

Training Subject: _____

Instructor Name: _____

Employee Name	Position	Signature	Date

Appendix G
Radiation Detection Response Procedures

The purpose of this document is to set forth the procedures that will be utilized by Covanta Tulsa personnel in responding to an alarm from the scale house radioactivity monitors.

1. All vehicles containing waste for processing at Covanta Tulsa will pass through the radiation detection equipment located on the incoming scales. This equipment includes remote radiation detector portal monitors that detect medium and high-energy gamma and x-rays. The background level is 4.5 micro-Roentgens/hour. The detectors are set to alarm at two times background radiation level (based on calibration vendor recommendations).

2. If the detection equipment enunciators alarm, the Shift Supervisor will be immediately notified. The Shift Supervisor will then contact the Facility Manager, EH&S Coordinator and/or the Chief Engineer. Telephone numbers are listed at the end of this procedure.

3. The Shift Supervisor will direct the vehicle to travel over the scale and pass through the detectors slowly a second time to verify the alarm. If no alarm sounds, the vehicle will be directed to repeat the step a third time. The vehicle will be permitted to proceed to the receiving inspection if a non-detect occurs on the second and the third pass through the radiation detection equipment. If an alarm occurs on either the second or third pass through the radiation detection equipment, the vehicle will not be permitted to enter the tipping hall, and will be directed to the designated holding area which is located on the far west side of the contractor parking lot out of the way of facility traffic. The vehicle will remain parked in the holding area until the radioactive levels drop below the detectable limit. Covanta will **immediately** contact DEQ regardless of what the hand-held detector measures.

4. The EH&S Coordinator, Chief Engineer or Shift Supervisor will use the hand-held Bicron Microanalyst radiation monitor which measures micro-Roentgens/hr (ur/hr), to:

    a. Further verify the presence of radioactive material

    b. Attempt to determine the location of the source within the vehicle. This includes ruling out the driver as the source of radiation as the result of a medical procedures or medication containing radiation.

    c. Determine the radiation level at the surface of the vehicle in milli-Roentgens per hour (mR/hr).

***Note: The hand-held Bicron Microanalyst measures the radiation in micro-Roentgens/hr (ur/hr) and to properly fill out the exemption form you must convert this reading to milli-Roentgens per hour (mR/hr). To accomplish this you must move the decimal place three places to the left.**

Example: If the meter reads 200 uR/hr, then this reading would be 0.200 mR/hr.

If the hand-held detector measures the radiation at less than 80 micro-Roentgens/hr, the waste will be allowed to be processed.

Set the handheld radiation monitor to the lowest multiplier (1X). Watch the radiation level as you approach the vehicle. HALT IMMEDIATELY if the radiation level exceeds the maximum level the instrument can detect before you reach the vehicle, 1000X. Contact the Radiation Management Section of the Land Protection Division of the ODEQ immediately.

Depending on the radiation level indicated by the hand-held survey meter, the incident will be categorized as either Level A or Level B detection as follows:

CAUTION: DO NOT attempt to open the waste container and sort through the waste.

LEVEL A DETECTION

If the hand-held monitor indicates that the level of radiation is less than or equal to 2 milli-Roentgen/hr less than two feet from the surface of the truck, then the detection will be classified as a Level A detection. In the case of a Level A detection, the vehicle is instructed to remain in the holding area while information about the hauler's route is taken and the appropriate regulatory agencies are contacted. With the DOT exemption from the Oklahoma DEQ, the truck may be allowed to return the wastes to the Generator or find a holding place for the waste until it can be disposed. ODEQ has the option of allowing the truck to be processed.

LEVEL B DETECTION

All detection's that measures greater than 2 milli-Roentgen/hr at a distance equal to or greater than two feet from the surface of the truck will be categorized as Level B detections. In addition, if a vehicle sets off the portal monitor alarm located at the truck scales before the truck is actually on the scale, the detection will be categorized as Level B. In the instance of a Level B detection, the vehicle will be parked in an isolated holding area and the area surrounding the vehicle will be cordoned off with caution tape. The driver of the vehicle will be instructed to remain on the grounds until the arrival of a regulatory agency official or until a DOT exemption is obtained from the Department of Environmental Quality. See step #5.

NOTE: If the hand-held radiation monitor indicates a level of greater than or equal to 2 mR/hr, the level of radiation is higher than that permissible in a unrestricted area. The amount of time spent in the vicinity of the radioactive material must be minimized, and the furthest distance possible from the material must be maintained.

LEVEL C DETECTION

This level will only apply to medical waste loads and may require the truck be returned to the originator. If the load is to be returned to the originator an ODOT exemption must be obtained before the truck can leave the grounds. Refer to Step No. 5 below. This will be determined after contacting the originator to send out a representative to identify the material. If the material is determined to possess a 24-hour or less half-life the load will be parked in the designated holding area until such time has expired. If the material has a half-life greater than 24-hours the load will be returned to the originator.

5. To attain an ODOT exemption these steps must be followed:
    a. The highlighted areas of the attached form (DOT- SP 11406 Rev. 7: Shipment Approval Form) must be completed.
    b. This form must then be faxed to the regulatory agency (ODEQ) to obtain approval for the exemption.
    c. The regulatory agency (ODEQ) will then fax the exemption form back to Covanta signed with an approval number.
    d. An ODOT exemption must be obtained and approved from ODEQ before the truck can leave the grounds.

6. If the detection is confirmed a Level B through Step No. 4, the Facility Manager (or designated representative) will immediately contact the appropriate regulatory authorities.

7. In all instances of confirmed radiation detection (as described above), the vehicles will be rejected by the facility. Designated facility personnel will assist the haulers in handling the rejected loads according to the procedures for either Level A, or Level B detection as described below.

8.a. Level A Detection Handling Procedures

Once the regulatory authorities have been notified and an exemption for transportation or processing has been obtained, the vehicle will be directed to return to the sight where the load was received or proceed to the receiving inspections.

8.b. Level B Detection Handling Procedure

As indicated above, the vehicle will be parked in the designated holding area further away from the scale house and Facility personnel. The area surrounding the vehicle will be cordoned off with caution tape. The driver of the vehicle will be requested to remain on-site pending the arrival of the regulatory authorities or response team. If the driver chooses to leave the Facility site, he/she will be informed that the law enforcement authorities will be provided with a description and vehicle identification.

Covanta Tulsa will cooperate with and assist the regulatory authorities and/or response team accordingly.

9. Transportation of Radioactive Waste Off-Site

If regulated radioactive waste must be returned to the Originator, or if radioactive waste must be transported to a licensed facility for storage or disposal, the Facility will contract with licensed radioactive waste brokers, processing services and disposal sites to provide consulting, packaging, transport, storage and/or disposal services for radioactive material.

10. The EH&S Coordinator or Chief Engineer will prepare all required incident reports complete with hauler's identification, driver's name, route information and documentation of the incidents handling.

11. In the event that a radiation alarm occurs on a Saturday, the following notification procedures will be followed:

    Notify the Facility Manager, Chief Engineer and/or EH&S Coordinator.

    If the detection is Level A, the procedures for Level A detections described above will be implemented as soon as ODEQ is able to respond. Information from the attached form (DOT-E 10656) will be taken for the regulatory agency to determine if an exemption can be obtained.

    If the detection is Level B, the vehicle will be cordoned off at the designated holding area until a regulatory response team can respond. Information from the attached form (DOT-E 10656) will be taken for the regulatory agency to determine if an exemption can be obtained.

If the detection is Level C, the originator will be contacted to establish a proper response to investigate the material half-life. Information from the attached form (DOT-E 10656) will be taken for the regulatory agency to determine if an exemption can be obtained.

The handling and disposal procedures for Level A and Level B detection will then be carried out as previously described.

CONTACT NUMBERS

Facility Manager	Terrence Byrne: 918-699-0011 x4721 office
Environmental Specialist	Piotr Baidas : 918-699-0011 x4711
Material Compliance Specialist	Fred Baker: 918-699-0011 office
Safety Coordinator	Dustin Stallsworth: 918-699-0011 x 4736
ODEQ (Radiation Management)	1-800-522-0206 (24 hours a day) (405) 702-5100 (M-F 8 a.m.-5 p.m.)

DOT-SP 11406
Shipment Approval Form

June 05, 2019

U.S. Department
of Transportation

East Building, PHH-30
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 11406
(TENTH REVISION)

EXPIRATION DATE: 2023-05-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Shippers and carriers of liquid or solid waste (henceforth called "waste") with low levels of external radiation who are approved by state radioactive material control officials registered with the Office of the Executive Director of the Conference of Radiation Control Program Directors (CRCPD), Frankfort, Kentucky

2. PURPOSE AND LIMITATION:

a. This special permit authorizes the one-way transportation in commerce by highway or rail of shipments of liquid or solid waste (hereafter referred to as "waste") in accordance with the conditions and requirements of set forth below, when:

(1) During or at the conclusion of transportation or during inspection of the shipment following its receipt, the waste has been found to contain unexpected and unidentified radioactive material or contamination; and

(2) The waste is transported to a location determined by the authorizing state official to be more appropriate for proper characterization and/or disposition of the discovered radioactivity.

b. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.

c. The safety analysis performed in the development of this special permit only considered the hazards and risks associated with transportation in commerce.

d. Party status will not be granted to this special permit.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR Part 172, Subparts C, D, E, F, G, H and I as they pertain to required shipping papers, package marking and labeling, placarding, emergency response information, training and security requirements; 49 CFR Part 173, Subpart B, § 173.22(a)(1) as it pertains to classification of hazardous materials; 49 CFR Part 173, Subpart I as it pertains to packaging and transport of radioactive material; 49 CFR Part 174, Subpart K as it pertains to detailed requirements for rail transport of radioactive materials; and 49 CFR 177.842 as it pertains to highway transport of radioactive materials.

5. BASIS: This special permit is based on the Conference of Radiation Control Program Directors' application dated May 6, 2019, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	**Hazard Class/ Division**	**Identi-fication Number**	**Packing Group**
Radioactive material, excepted package-limited quantity of material	7	UN2910	N/A
Radioactive Material, Type A package *non-special form, non fissile or fissile-excepted*	7	UN2915	N/A
Radioactive Material, Type A package, special form *non fissile or fissile-excepted*	7	UN3332	N/A
Radioactive Material, Type B(U) package *non fissile or fissile-excepted*	7	UN2916	N/A
Radioactive Material, low specific activity (LSA-I) *non fissile or fissile-excepted*	7	UN2912	N/A

Radioactive Material, low specific activity (LSA-II) *non fissile or fissile-excepted*	7	UN3321	N/A
Radioactive Material, low specific activity (LSA-III) *non fissile or fissile-excepted*	7	UN3322	N/A
Radioactive Material, surface contaminated objects (SCO-I *or* SCO-II) *non fissile or fissile-excepted*	7	UN2913	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING: The shipments are excepted from the packaging and transport requirements for radioactive material in Part 173, Subpart I and may be transported by motor vehicle or rail freight provided the radioactive material will not be released from the conveyance during transit and that the transport conditions in the shipment approval form specified in paragraph 7.e. of this special permit are satisfied.

b. CLASSIFICATION AND TESTING: The shipments are exempted from the classification and description requirements referenced in § 173.22(a)(1) provided that the measured radiation levels at the external surface of the conveyance do not exceed 0.50 mSv/h (50 mrem/h) and, in the case of a highway vehicle, the dose rate in any occupied space is no greater than 0.02 mSv/h (2 mrem/h).

c. COMMUNICATIONS: The packages and conveyances transported under this special permit are exempted from the communication requirements of 49 CFR Part 172, Subpart C (shipping papers), D (marking), E (labeling), and F (placarding) provided the communication provisions in paragraphs 10.a. and 10.d. as well as the shipment approval form specified in paragraph 7.e. of this special permit are satisfied.

d. TRAINING AND SECURITY REQUIREMENTS: The requirements of Subparts H and I of Part 172 are waived.

e. SHIPMENT APPROVAL BY STATE RADIATION CONTROL OFFICIAL: Prior to shipment of the waste, the state radiation control official of the state where the radiation was detected must evaluate the radiological risk associated with the transport of the material, under the conditions of this special

permit, to a location where the radioactive material can be identified and properly treated. If the official believes that these risks are no greater than the risk associated with normal transport of radioactive material in compliance with the regulations, he/she may authorize the shipment by completing and signing a shipment approval form containing all the information shown in Annex A in a format controlled by CRCPD. Any additional or special conditions necessary for safe transport must be included in the approval. Note: This special permit is not required in order to transport radioactively contaminated household wastes, since according to DOT Letter of Interpretation Ref. No. 04-0197, dated October 8, 2004, radioactively contaminated household wastes are not regulated in transport by DOT under its hazardous materials regulations.

f. SHIPMENT APPROVAL FORM DISTRIBUTION: Copies of the shipment approval form must be provided, in advance of the shipment, by the issuing official to the following:

(1) The Office of the Executive Director, CRCPD, Frankfort, KY;

(2) The facility where the radioactive material was discovered;

(3) The facility from which the waste was shipped prior to detection;

(4) The facility to which the waste will be shipped for identification and/or treatment;

(5) The State Radiation Control Official(s) having authority over the shipment during transit (if applicable). Note: Transit states may opt out of the notification process upon consultation and agreement with emergency response organizations and when documentation is on file with CRCPD.

(6) The State Radiation Control Official having authority over the facility receiving the shipment (after detection);

(7) The State Radiation Control Official having authority over the facility or company from which the shipment originated (before detection).

g. SHIPMENT APPROVAL FOR CARRIERS: A person at the facility where the radioactive material was discovered must provide a copy of the shipment approval and special permit

to the operator of the vehicle used for highway shipments and to the railroad management or dispatch office for rail freight shipments.

h. IDENTIFICATION AND DISPOSITION OF RADIOACTIVE MATERIAL TRANSPORTED UNDER THIS SPECIAL PERMIT: Once the radionuclides in the waste are identified and disposition is arranged, the person responsible for the identification must complete the identification and disposition portion of the shipment approval form and provide the completed form to:

(1) The Office of the Executive Director, CRCPD;

(2) The state official at the state of origin (prior to detection);

(3) The state official issuing the shipment approval; and

(4) The state official of the state where identification and disposition occurred, if different from paragraph 7.h.(2) in this permit.

Completed records must be maintained by the State Radiation Control Official for a period of three years from the date of issuance.

8. SPECIAL PROVISIONS:

a. Shipment Approval Assigned Number: One Radiation Control Official in each State must assign and maintain a list of shipment approval numbers for all shipment approvals issued by that state under DOT-SP 11406. The nine figures in the shipment approval number should be determined as follows: the first two characters are the abbreviation of the state of origin (where the radioactive material was detected); the third and fourth characters must be the abbreviation of the state of destination (where the radioactive material will be dispositioned); the fifth and sixth characters must be the last two digits of the year of issue; the seventh, eighth and ninth characters must be the sequential number of the shipment approved for that year between those states. For example PA-NJ-00-002 would be the second shipment from Pennsylvania to New Jersey that was approved by the official during 2000.

b. Additional modifying symbols may be added to the U.S. postal designation for the state of origin only, in order to distinguish among multiple originating state offices if necessary, if written permission is first obtained from the

CRCPD. In these cases each originating state office must assign its own sequential numbers (the seventh, eighth and ninth characters in paragraph 8.a.) for each year, starting with 01.

c. Each state radioactive material official approving shipments must have a copy of this special permit and access to the current Hazardous Materials Regulations (Title 49 of the Code of Federal Regulations, Parts 100-185). This official should also provide a copy of this special permit and their implementing instructions to all managers of landfill, incineration or other waste processing facilities within their state that have installed radiation monitoring systems.

d. The CRCPD must provide a listing of all of the State Radioactive Material Control Officials operating under the terms of this special permit to OHMSPA. The listing must be updated within 90 days when there is a change in any of the State Radioactive Material Control Officials.

9. MODES OF TRANSPORTATION AUTHORIZED: Rail freight and motor vehicle.

10. MODAL REQUIREMENTS:

a. A current copy of the shipment approval document and special permit must be carried in the cab of the motor vehicle in accordance with 49 CFR 177.817. For shipments by rail freight, the railroad management will provide train crews with the identity of the rail car and its position in the train.

b. Each carrier must ensure that the shipment described on the shipment approval document is transported over the most appropriate route without unnecessary or avoidable delay.

c. The shipment approval form and other provisions of this special permit satisfy: the Emergency Information and Training requirements of 49 CFR Part 172, Subpart G and Subpart H, and the modal Class 7 material requirements of Part 174, Subpart K and Part 177, Subpart B.

d. The special permit number and "Radioactive" must be conspicuously marked on two opposing sides of the conveyance for both rail and highway transport.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this

special permit and penalties prescribed by the Federal hazardous materials transportation law 49 U.S.C. 5101 et seq:

- All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
- Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee" as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit.

No person may use or apply this special permit, including display of its number, when the special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- "The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: In addition to the reporting requirements of §§ 171.15, 171.16, and 174.750 or 177.854, a carrier must report, as soon as practicable, any incident involving a shipment in transportation under this special permit to the Associate Administrator for Hazardous Materials Safety by calling the National Response Center at 1-800-424-8802. A call must also be made to the state official signing

the shipment approval as identified in paragraph 7.e. These telephonic notices should identify that the shipment is under DOT-SP 11406 and the nine-digit shipment approval identification number.

Issued in Washington, D.C.:

for William Schoonover
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/special permits/spec perm index.htm. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: JLW/TG

Annex A DOT-SP 11406 SHIPMENT APPROVAL FORM

Approval Number ____ ____ ____ _____ (Refer to SP 11406, paras. 8a-8b)

This shipment of waste contains unidentified radioactive material causing low levels of radiation outside the transport vehicle. Shipment is under Special permit DOT-SP 11406 without a determination of materials meeting or not meeting the regulatory definition of radioactive material. The shipment is a minor radiological concern based on considerations of the U.S. Department of Transportation and the state official signing this shipment approval document.

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DETAILS of DETECTION SITE, MATERIALS, and ORIGIN

Facility: Name _____ Type: _____

Address: _____

① Contact person: _____ Ph. _____ Fax. _____

☐ Highway or ☐ Rail Vehicle Type: _____ Id.No.: _____

Company: _____ Operator name: _____

② Contact person: _____ Ph. _____ Fax. _____

Description of waste and release risks: _____

_____

Radiation Measurement Date/time performed: _____

mrem/h (max) _____ location on vehicle _____

Inst.Mfgr./type/model _____ Bkg. mrem/h _____

Surveyor name: _____ Ph. _____

Shipment Origin Company: _____ Location: _____

Waste Origin: _____

③ Contact person: _____ Ph. _____ Fax. _____

==========

RADIATION CONTROL OFFICIALS (Detection, Origin, Transit, Destination States)

Detection State Official (receiving radiation detection info) Name: _____

④ Organization _____ Ph. _____ Fax. _____

Origin State Official (prior to detection) Name: _____

⑤ Organization _____ Ph. _____ Fax. _____

Transit State Official(s) (after detection) Name: _____

⑥ Organization _____ Ph. _____ Fax. _____

Destination State Official (after detection) Name: _____

⑦ Organization _____ Ph. _____ Fax. _____

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SP-11406 Approval Number ____ ____ ____ _____ Page 2

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DESTINATION for RADIOACTIVE MATERIAL IDENTIFICATION and DISPOSITION

If carrier and shipper to this location are different than ② and ③, show info in REMARKS

Company Name: _____ Location: _____

⑧ Contact person:_____ Ph._____ Fax._____

==========

APPROVAL of SHIPMENT and SPECIAL CONDITIONS Date: _____

Conditions: _____

_____

_____

⑨ Signature: _____ Ph._____ Fax._____

Title _____ Organization _____ Date _____

==========

IDENTIFICATION of RADIOACTIVE MATERIAL and DISPOSITION INFORMATION at DESTINATION

_____

_____

_____

⑩ Name:_____ Title:_____ Date:_____

Organization:_____ Ph._____ Fax._____

==========

RECORD of TRANSMITTALS (Shipment Approvals and identification/disposition)
(Circumstances may influence distribution)

Shipment Approvals (Sent by ④ or ⑨) to (Show date sent)

OED CRCPD_____ ① _____ , ② _____, ③ _____,

⑤ _____, ⑥ _____, ⑦ _____, ⑧ _____,

OTHER _____

Record of Identification and Disposition (Sent by ⑧, ⑩, or other ____) to

④ _____, ⑤ _____, ⑦_____, OED CRCPD _____

OTHER _____

==========

SP-11406 Approval Number ____ ____ ____ _____

REMARKS, OTHER INFORMATION

In case of an emergency, notify the National Response Center ((800)424-8802) and the (⑨) authorizing official and give the Special permit No. and Approval No.

Appendix H
Monthly ODEQ Report

NHIW Monthly Report

Facility: Covanta Tulsa Renewable Energy, LLC.
2122 South Yukon Avenue
Tulsa, OK 74107

Permit Number: 3572033

Month/Year:				
Date	**Generator Name**	**Waste Name**	**App #**	**Amount**

DEQ Form #520-821R

Revised July 1998

AUTHORIZATION TO DISCHARGE UNDER THE OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT NUMBER: OK0044156
ID NUMBER: I-72002050

In compliance with the Oklahoma Pollutant Discharge Elimination System (OPDES) Act, 27A O.S. §2-6-201 *et seq.*, Oklahoma Uniform Environmental Permitting Act, 27A O.S. §2-14-101 *et seq.*, and the rules of the Oklahoma Department of Environmental Quality promulgated thereunder,

Covanta Tulsa Renewable Energy, LLC
2122 South Yukon Ave.
Tulsa, OK 74107

is authorized to discharge wastewater from their facility, located at:

NE¼, NW¼, NE¼, Section 15, Township 19N, Range 12EIM,
Tulsa County, Oklahoma
or at 2122 South Yukon Ave., Tulsa, OK 74107

to receiving waters: Unnamed tributary of the Arkansas River (WBID# 120420010010_10) in Segment 120420

from Outfall 001 located at: Latitude 36° 07' 59.772" N, Longitude 96° 00' 59.152" W (GPS: NAD83)
NE¼, NW¼, NE¼, Section 15, Township 19N, Range 12EIM,
Tulsa County, Oklahoma

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III, hereof.

The above-referenced facility is authorized to retain wastewater in one (1) total retention (T01) and one (1) flow-through surface impoundment (F02) as described in the Appendix. Direct discharge of wastewater from impoundment T01 to waters of the state is specifically prohibited. Surface impoundments shall be maintained in accordance with Parts I, II, and IV hereof.

Issuance of this permit in no way or in any respect affects the permittee's civil or criminal responsibility regarding disposal of wastewater, except with respect to the permittee's legal responsibility under the OPDES Act and Department Rules.

This permit replaces and/or supersedes OPDES Permit No. **OK0044156** that became effective on February 1, 2016.

This permit shall become effective on March 1, 2021.

This permit and the authorization to discharge shall expire at midnight, on February 28, 2026.

This is to certify that the wastewater discharges set forth in this permit comply with the requirements of Oklahoma's Water Quality Standards, as amended, provided the permittee does not exceed the effluent limitations set forth in this permit.

Issued this 29th day of January, 2020.

For Oklahoma Department of Environmental Quality,

Carol Paden
Carol Paden, P.E., Manager
Industrial Permits Section
Water Quality Division

Shellie R. Chard
Shellie R. Chard, Director
Water Quality Division

PART I
EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Effluent Limitations and Monitoring Requirements for Outfall 001

During the period beginning the effective date of the permit and lasting through the expiration date, the permittee is authorized to discharge from Outfall 001.

The discharge from Outfall 001 consists of contact stormwater runoff. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Limitations

Parameters	Mass Loading Limitations (lbs/day unless otherwise specified)		Concentrations Limitations (mg/l unless otherwise specified)	
	Monthly Average	Maximum Daily	Monthly Average	Maximum Daily
Flow STORET: 50050	Report (MGD)	Report (MGD)	---	---
Total Suspended Solids (TSS) STORET: 00530	---	---	Report	45
Arsenic, total STORET: 01002	---	---	---	Report
pH STORET: 00400	---		Between 6.5 - 9.0 s.u.	

NOTE: See Parts II and III for Additional Requirements.

There shall be no discharge of a visible sheen of oil or globules of oil or grease on or in the water. Oil and grease shall not be present in quantities that adhere to stream banks and coat bottoms of water courses.

Surface waters of the State shall be maintained free from oil and grease and taste and odors.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

The discharge shall not contain chemical, physical, or biological substances in concentrations that are irritating to skin or sense organs or are toxic or cause illness upon ingestion by human beings.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:

Outfall 001: At the flow weir located in the Northeast corner of impoundment F02, and prior to discharging to the Arkansas River in the NE¼, NW¼, NE¼, Section 15, Township 19N, Range 12EIM, Tulsa County, Oklahoma, or at Latitude 36° 07' 59.772" N, Longitude 96° 00' 59.152" W (GPS: NAD83).

Monitoring Requirements and Sample Types

Parameters	Measurement Frequency	Sample Type
Flow	1/month	Estimated
Total Suspended Solids (TSS)	1/month	Grab
Arsenic, total	2/month	Grab
pH	1/month	Grab

(1) When discharging.

SECTION B. SCHEDULE OF COMPLIANCE

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule: None

SECTION C. REPORTING OF MONITORING RESULTS

Monitoring results shall be reported in accordance with the provisions of Part III.E.4 of the permit. Monitoring results obtained during the previous month shall be summarized and electronically reported on an electronic Discharge Monitoring Report (eDMR) form due to the Oklahoma Department of Environmental Quality, Water Quality Division, Wastewater Compliance Tracking Section no later than the 15th day of the month following the completed monthly test. If no discharge occurs during the reporting period, an eDMR form stating "No Discharge" shall be electronically submitted according to the above schedule. Instructions on how to register as a Preparer or Signatory for eDMRs, as well as how to prepare and submit eDMRs, can be found on DEQ's website at https://www.deq.ok.gov/water-quality-division/electronic-reporting/. Assistance is also available by contacting DEQ at (405) 702-8100 or deqreporting@deq.ok.gov.

The first report is due on April 15, 2021.

PART II
OTHER PERMIT REQUIREMENTS

A. REGULATORY NOTICE

The permittee is hereby given notice that this permit is in all respects subject to compliance with and actions under any and all applicable and relevant terms, conditions, provisions and requirements and any and all amendments of the laws of the State of Oklahoma, the rules of the Oklahoma Department of Environmental Quality, and Oklahoma's Water Quality Standards. The absence of any express reference within this permit of any particular statutory requirement, rule(s), regulation(s), or standard(s) shall in no respect be deemed or construed to exempt or preclude the application of such requirement, rule(s), regulation(s), or standard(s) to this permit or the permittee. By the Director's approval, grant and issuance of this permit, permittee acknowledges receipt of true, correct and current copies of Oklahoma's Water Quality Standards, and the rules of the Oklahoma Department of Environmental Quality.

B. REOPENER CLAUSE

This permit may be reopened for modification or revocation and reissuance to require additional monitoring and/or effluent limitations where actual or potential exceedances of State water quality criteria are determined to be the result of the permittee's discharge to the receiving water(s), or a Total Maximum Daily Load is established for the receiving stream(s), or when required as technology advances. Modification or revocation and reissuance of the permit shall follow regulations listed at 40 CFR 124.5.

C. LABORATORY CERTIFICATION

All laboratory analyses for the parameters specified in this permit must be performed by a laboratory certified by the Oklahoma Department of Environmental Quality for those parameters.

D. ANALYTICAL REQUIREMENTS

Unless otherwise specified in this permit, effluent and/or upstream monitoring shall be conducted according to analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed at 40 CFR Part 136 in effect on the effective date of this permit. Appendices A, B, and C to 40 CFR Part 136 are specifically referenced as part of this requirement. Amendments to 40 CFR Part 136 promulgated and incorporated by reference into OAC 252:606 after the effective date of this permit shall supersede these requirements as applicable.

E. SURFACE IMPOUNDMENT REQUIREMENTS

1. A minimum freeboard of 2 feet shall be maintained for surface impoundments T01. A minimum freeboard of 3 feet shall be maintained for surface impoundment F02.

2. The permit may be reopened to implement and/or require impoundment modifications, additions, extensions, and/or operational changes; monitoring and reporting; reclassification of wastes; sludge management plans; best management practices; closure plans; and/or other appropriate actions.

3. At such time as any of the impoundments (F02 and T01) are to be permanently taken out of service or at such time as the contents of any of the impoundments (F02 and T01) pose a risk to the environment or waters of the state, the owner or operator of the facility shall be required to follow all closure requirements contained in OAC 252:616-13.

4. In all other respects, surface impoundments F02 and T01shall be subject to standard conditions for surface impoundments contained in OAC 252:616, Subchapters 5, 7, and 13, including but not limited to requirements for construction, operation, maintenance, monitoring and closure.

F. OTHER DISPOSAL METHODS

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewater shall be disposed of in a State-approved industrial waste disposal site or to a company for recycling.

If any such industrial wastes are removed from the facility, the permittee shall keep accurate records which include the following information:

a. Name and address of company hauling waste.
b. The type and amount of waste hauled.
c. The final disposal site of waste hauled.

Upon request, the above records shall be made available to the staff of the Department for inspection, review, and copying.

APPENDIX

DESCRIPTION OF WASTEWATER TREATMENT/DISPOSAL SURFACE IMPOUNDMENTS (S.I.s)

S.I. [1]	Impoundment Description and Wastewater Classification OAC 252:616-1-2	Liner Description	Holding Capacity [2] OAC 252:616-7-1(6)	Wastewater Destination
T01	Stormwater runoff and wash-down water from the main processing areas - Class I	Concrete	15,000 gallons 21.5' x 12' x 8'	Total retention or pumped to an above ground tank
F02	Stormwater runoff - Class III	Native Soil	983,000 gallons 120' x 365' x 6'	Outfall 001

(1) Designation T refers to total retention surface impoundment.
Designation F refers to flow-through surface impoundment.
(2) Based on information provided in the application.

LOCATION OF SURFACE IMPOUNDMENTS

S.I.	Legal Location	General Location and Description
T01	NE¼, NW¼, NE¼, Section 15, Township 19N, Range 12EIM, Tulsa County, Oklahoma	Center of Facility and South of F02
F02	NE¼, NW¼, NE¼, Section 15, Township 19N, Range 12EIM, Tulsa County, Oklahoma	North of facility along North property line

FACT SHEET

FOR THE DRAFT AUTHORIZATION TO DISCHARGE TO WATERS OF THE UNITED STATES UNDER THE OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM (OPDES).

Permit Number:	OK0044156
Facility ID Number:	I-72002050
Applicant:	Covanta Tulsa Renewable Energy, LLC 2122 S Yukon Ave Tulsa, OK 74107
Issuing Office:	Oklahoma Department of Environmental Quality Water Quality Division 707 N. Robinson P.O. Box 1677 Oklahoma City, OK 73101-1677
Prepared By:	Michael Thomas Industrial Permits Section Water Quality Division
Date Prepared:	September 2, 2020
Reviewed by:	Carol Paden, P.E., Manager Industrial Permits Section Water Quality Division Karen Steele, P.E., Engineering Manager Wastewater Group Water Quality Division

In accordance with 40 CFR 124.8 and 124.56, this fact sheet describes the applicant's facility operation and sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other necessary explanations of the derivation of specific effluent limitations and conditions, including citations to applicable effluent limitation guidelines or performance standards as required by 40 CFR 122.44. In accordance with 40 CFR 122.44(l), proposed permit limits for reissued permits are based on the more stringent of applicable technology-based limitations, applicable water quality-based limitations, or limitations in the previous permit.

Citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations. Citations to OAC 252 and OAC 785 refer to promulgated regulations listed at Titles 252 and 785, Oklahoma Administrative Code.

I. PERMITTING BACKGROUND

A. CHRONOLOGY OF PERMITTING ACTIVITIES

The following is a chronology of permitting activities leading up to the renewal of this permit.

01/19/2021:	Routed for Final issuance.
12/16/2020:	Public noticed by facility
12/11/2020:	Public noticed by DEQ
11/06/2020:	Routed for courtesy review.
09/22/2020:	Administrative complete.
09/17/2020:	Proof of public notice received.
09/11/2020:	NOD sent for proof of public notice.
08/26/2020:	Site visit conducted.
08/04/2020:	OPDES permit application (Forms 1, 2C, and 2SI) received.

B. PROPOSED PERMITTING ACTION

It is proposed that the OPDES Permit No. OK0044156 be reissued for a five year term in accordance with regulations promulgated at 40 CFR 122.46(a) and OAC 252:606-1-3(b).

II. APPLICANT ACTIVITY

A. DESCRIPTION AND LOCATION OF FACILITY

Covanta Tulsa Renewable Energy, LLC operates the Walter B. Hall Resource Recovery Center. This facility is a waste combustion center that generates steam and electricity. The SIC code for this industry is 4953. Solid municipal waste is incinerated and combusted in a furnace reducing it to ash residue. Heated air generated by combustion is used in a boiler to produce steam. The facility produces approximately 5,850,000 lbs/day of steam, 280 tons/day of ash residue, 20 tons/day of ferrous metal scrap, and 3 tons of non-ferrous metal scrap.

The main part of the facility is located in the NE¼, NW¼, NE¼, Section 15, Township 19N, Range 12EIM, Tulsa County, Oklahoma or at 2122 South Yukon Ave., Tulsa, OK 74107. The facility began operation in 1986, and it employs approximately 40 employees. It operates 24 hours per day, seven days per week, in two shifts.

B. WASTEWATER GENERATION AND TREATMENT

Process wastewater, sanitary wastewater, cooling tower blowdown, and boiler blowdown from the facility are discharged to the City of Tulsa's sanitary sewer. Stormwater runoff and wash-down water from the process areas of the facility are collected in the total retention surface impoundment (T01). The wastewater is then pumped to a 25,000 gallon above ground tank and is reused in the facility. Flow-through surface impoundment (F02) collects stormwater runoff from the other areas of the facility. Outfall 001 is a v-notch weir on impoundment F02. There is no regular discharge from the outfall. It is designed to act as an outlet in the unlikely event of a stormwater overflow from the facility.

III. DISCHARGE INFORMATION

A. DISCHARGE LOCATION

The discharge is to an unnamed tributary of the Arkansas River, located in stream segment 120420 of the Middle Arkansas River Basin. Based on the application, the facility has one outfall as summarized below:

Outfalls to Surface Waters

Outfall	Location		Receiving Stream
	Legal Description	Latitude - Longitude	
001	NE¼, NW¼, NE¼, Section 15, Township 19N, Range 12EIM, Tulsa County, Oklahoma	N 36° 07' 59.772" W 96° 00' 59.152"	Unnamed tributary of the Arkansas River

B. DISCHARGE DESCRIPTION AND CHARACTERISTICS

The discharge consists of untreated contact stormwater runoff. The facility has not discharged from Outfall 001 during the period of record (February 1, 2016, through June 30, 2020).

IV. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

A. GENERAL

Regulations promulgated at 40 CFR 122.44(a) and OAC 252:606-5-2(1) require technology-based effluent limitations to be placed in OPDES permits based on effluent limitation guidelines where applicable, on Best Professional Judgment (BPJ) of the permit writer in the absence of guidelines, or on a combination of the two.

B. APPLICABLE EFFLUENT LIMITATION GUIDELINES

The facility discharges only contact stormwater and technology based limits have not been promulgated for this activity.

C. BEST PROFESSIONAL JUDGMENT (BPJ)-BASED LIMITATIONS

The BPJ parameters included for Outfall 001 are Total Suspended Solids (TSS) and total arsenic. The permit limit for TSS was developed using the previous permit and permits for facilities with similar wastewater as guidance. Based on analytical data showing high concentrations of arsenic in impoundment F02 a report requirement for arsenic was added to the previous permit. Both parameters will be carried over to the draft permit.

Parameters	Concentration [1]	
	Monthly Avg.	Daily Max.
TSS	Report	45 mg/l
Arsenic, total	---	Report

[1] When discharging

D. VARIANCES

No request for a variance was received.

V. WATER QUALITY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

A. GENERAL

Section 101 of the Clean Water Act (CWA) states that "... it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited..." A permit containing technology-based permit limitations alone may not adequately protect the quality of a specific receiving stream. Thus, additional water quality-based effluent limitations and/or conditions are considered in the draft permit using narrative and numerical standards contained in the Oklahoma Water Quality Standards (OWQS), as amended (OAC 785:45), and implementation criteria contained in OACs 785:46 and 252:690, promulgated by the Oklahoma Water Resources Board (OWRB) and Department of Environmental Quality (DEQ), respectively. This is to ensure that no point-source discharge results in instream aquatic toxicity, a violation of applicable narrative or numerical State water quality standards, or aquatic bioaccumulation which threatens human health.

B. RECEIVING STREAM DESIGNATED USES AND ANTIDEGRADATION PROVISIONS

1. Outfall 001

Outfall 001 discharges to the unnamed tributary of the Arkansas River (WBID# 120420010010_10) in Segment 120420 of the Middle Arkansas River Basin. As designated in Appendix A of the OWQS, the designated uses of the Arkansas River in this segment are:

Emergency Public and Private Water Supply (OAC 785:45-5-11);
Fish and Wildlife Propagation/Warm Water Aquatic Community (OAC 785:45-5-12);
Agriculture (OAC 785:45-5-13);
Primary Body Contact Recreation (OAC 785:45-5-16);
Navigation (OAC 785:45-5-18);
Aesthetics (OAC 785:45-5-19); and
Fish Consumption (OAC 785:45-5-20).

2. Antidegradation Provisions

This segment of the Arkansas River is not designated as an Outstanding Resource Water (ORW), High Quality Water (HQW), or Sensitive Water Supply (SWS) in Appendix A of the OWQS. Neither is it designated in Table 1 of Appendix B of the OWQS as an area of ecological and/or recreational significance or in Table 2 of Appendix B as an area containing federally-listed endangered species.

C. WATER QUALITY STANDARDS IMPLEMENTATION

1. Water Quality Standards Implementation Process

To achieve the objectives stated in Section V.A above, each pollutant present at measurable levels in the facility's effluent or which has technology-based concentration limitations, for which there is one or more applicable numerical water quality criteria, is screened against the applicable numerical criteria to determine whether the pollutant has reasonable potential (RP) to exceed any of the criteria. The screens are performed in accordance with the OWQS, OWQS implementation criteria in OAC 785:46 and OAC 252:690, and the Continuing Planning Process (CPP) document. In the RP screening process, the 95th percentile effluent concentration, or estimate thereof if the effluent data set is not sufficiently large to

determine it directly, is used to compute an instream concentration according to regulatory mixing zone equations defined in OAC 785:46. Calculated instream concentrations are then compared with applicable criteria to determine whether RP is exhibited for any of the screened pollutants. If RP is exhibited, in accordance with 40 CFR 122.44(d)(1)(vi) and OAC 252:690, a wasteload allocation and criterion long term average is computed for each applicable criterion. Water quality-based permit limitations are calculated for each pollutant exhibiting RP for all applicable criteria. The most stringent of the resulting monthly average permit limitations is established in the draft permit for each pollutant requiring such limitations. However, after reviewing the application for this facility it was determined that there were no pollutants present at or above the applicable water quality criteria; therefore RP calculations are not needed.

D. WATER QUALITY-BASED REQUIREMENTS

1. Protection for Emergency Public and Private Water Supply Use

Emergency public and private water supply use is determined in accordance with OAC 785:45-5-11(a), which states that during emergencies, those waters designated Emergency Public and Private Water Supplies may be put to use. Therefore, in accordance with OAC 785:45-5-10 and per information provided in the application, the discharge does not contain any substances at levels which would require water quality limitations and/or monitoring for the Public and Private Water Supply designated use.

The draft permit will contain a narrative condition stating "surface waters of the State shall be maintained free from oil and grease and taste and odors".

2. Protection of the Fish and Wildlife Propagation Use

a. DO and DO-Demanding Substances

Pursuant to OAC 785:45-5-12(f)(1)(A), dissolved oxygen (DO) criteria are designed to protect the diverse aquatic communities of Oklahoma. Based on the nature of the wastewater, the wastewater should not contain oxygen demanding substances at levels which would have reasonable potential to violate numerical criteria. Therefore, no permit limit or monitoring requirement is imposed for this criterion.

b. pH

OAC 785:45-5-12(f)(3) states, "pH values shall be between 6.5 and 9.0 in waters designated for fish and wildlife propagation; unless pH values outside that range are due to natural conditions." This pH range is established in the draft permit.

c. Oil and Grease

OAC 785:45-5-12(f)(4) states, "All waters having the designated beneficial use of any subcategory of fish and wildlife propagation shall be maintained free of oil and grease to prevent a visible sheen of oil or globules of oil or grease on or in the water. Oil and grease shall not be present in quantities that adhere to stream banks and coat bottoms of water courses or which cause deleterious effects to the biota."

The discharge is not expected to contain pollutants which would require numeric oil and grease limitations or monitoring. However, a narrative (water quality-based) condition prohibiting the discharge of any visible sheen of oil or globules of oil or grease will be included in the draft permit for Outfall 001.

d. Temperature

There is no addition of heat from artificial sources to the water discharged at Outfall 001. Thus, no additional permit action is required.

e. Biological Criteria

Pursuant to OAC 785:45-5-12(f)(5), aquatic life in all water bodies with the beneficial use designation of Fish and Wildlife Propagation (excluding waters designated "Trout, put-and-take") shall not exhibit degraded conditions. Based on the nature of the wastewater, the treated wastewater is not expected to degrade the diversity, similarity, community structure, species tolerance, trophic structure, dominant species, indices of biotic integrity, indices of well-being, or other measures. Therefore, no permit limit or monitoring requirement is imposed for this criterion.

f. Toxic Substances

In accordance with OAC 785:45-5-12(f)(6)(A), surface waters of the state shall not exhibit acute toxicity and shall not exhibit chronic toxicity outside the chronic regulatory mixing zone. Based on the permit application, the discharge does not contain toxic substances at levels that could result in acute or chronic toxicity to fish or wildlife. Since the facility is a minor discharger, whole effluent toxicity (WET) testing is not required.

g. Turbidity

OAC 785:45-5-12(f)(7) states that turbidity from other than natural sources shall be restricted so as not to exceed the numeric limit of 50 NTUs for surface waters that have a beneficial use of Warm Water Aquatic Community. The draft permit includes a technology-based limitation for TSS (a daily maximum limit of 45 mg/L) and a water quality-based narrative requirement for suspended solids. It is the BPJ of the permit writer that limitation on TSS should adequately control turbidity in the facility's discharge.

3. Protection of the Agriculture Use

Per information provided in the permit application, the discharge does not contain chlorides, sulfates, or total dissolved solids at levels which would require water quality limitation and/or monitoring.

4. Protection of the Primary Body Contact Recreation Use

Per information provided in the permit application, the discharge does not contain any sanitary waste. Therefore, coliform bacteria, Escherichia coli (E. coli), and/or enterococci are not expected to be present at levels which would require water quality limitation and/or monitoring.

OAC 785:45-5-16(a) states "The discharge shall not contain chemical, physical, or biological substances in concentrations that are irritating to skin or sense organs or are toxic or cause illness upon ingestion by human beings." The draft permit will contain a narrative stating the prohibition of these conditions for Outfall 001.

5. Protection of the Aesthetics Use

Aesthetics use is determined in accordance with OAC 785:45-5-19, which states, "the surface waters of the state must be free from floating materials and suspended substances that produce objectionable color and turbidity." A narrative requirement is established in the draft permit to prohibit the discharge of floating

solids or visible foam in other than trace amounts. In addition, the technology-based numerical effluent limitations of a 45 mg/L daily maximum for TSS should also help to maintain the narrative water quality criteria for TSS.

6. Protection for Consumption of Fish Flesh Use

In accordance with OAC 785:45-5-20(a), "surface waters of the state shall be maintained so that toxicity does not inhibit ingestion of fish and shellfish by humans." Per information provided in the permit application, the discharge does not contain pollutants at levels which would require fish consumption water quality limitation and/or monitoring.

E. EFFLUENT AND BACKGROUND MONITORING REQUIREMENTS

Since it was determined that there were no pollutants present for which RP calculations would be needed, further effluent monitoring nor additional background monitoring is not justified.

F. 303(d) LIST

1. Water Quality Assessment and Causes of Impairment

The 2018 edition of the state's 303(d) list indicates the following:

The segment of the Arkansas River to which Outfall 001 discharges (WBID# 120420010010_10) is listed as impaired. The listed cause is cadmium.

2. 303(d) List-Related Permitting Actions

a. Permitting Actions

Where causes of impairment are listed generically, i.e., as a class of pollutants rather than as a specific pollutant or pollutants, EPA Region 6 policy requires that the draft permit include monitoring and reporting requirements for constituent pollutants in each listed class of pollutants as well as a reopener clause to incorporate the results of the approved TMDL as permit conditions. The data collected as a result of this requirement would then be used to support TMDL development. The facility does not discharge cadmium, and therefore no 303(d) list-related permitting actions are necessary.

b. Reopener clause

A reopener clause is provided in the permit for the purpose of incorporating provisions of the TMDL after it is completed and approved.

3. Total Maximum Daily Load (TMDL)

A TMDL for cadmium has not been completed for this segment of the Arkansas River (WBID# 120420010010_10). At this time a TMDL for this segment has not been scheduled. This facility does not discharge cadmium, and the results of a TMDL should not the affect monitoring and reporting requirements for this facility.

G. ANTIDEGRADATION REQUIREMENTS

As stated in Section V.B, no antidegradation restrictions apply to this segment of the Arkansas River. Implementation of the state's antidegradation policy, as described at OAC 785:46, Subchapter 13, requires no

further protection beyond the Tier 1 level (maintenance and protection of designated uses) for these receiving waters.

H. PROTECTION OF ENDANGERED AND THREATENED SPECIES AND CRITICAL HABITAT

The segment of the Arkansas River to which the facility discharges is considered by the U.S. Fish and Wildlife Service (USFWS) to be a sensitive area for endangered or threatened species. Since there is no proposed increase in the discharge or change in the point of discharge, DEQ has concluded that notification of USFWS is not required, other than through the standard public notice process.

VI. NON-DISCHARGE REQUIREMENTS

A. SURFACE IMPOUNDMENTS

Description of Wastewater Treatment/Disposal Surface Impoundments (S.I.s)

Classification [1] OAC 252:616-1-2		Liner Type [2]	Holding Capacity [2] or Dimensions OAC 252:616-7-1(6)	WASTEWATER Destination
S.I.	Wastewater			
T01	Stormwater runoff and wash-down water from the main processing areas - Class I	Concrete	15,000 gallons 21.5' x 12' x 8'	Total retention or pumped to an above ground tank
F02	Stormwater runoff - Class III	Native Soil	983,000 gallons 120' x 365' x 6'	Outfall 001

(1) Wastewater Classification according to OAC 252:616-1-2
(2) Based on information contained in the application

Location of Surface Impoundments

S.I.	Legal Location	Relative Location of Impoundments
T01	NE¼, NW¼, NE¼, Section 15, Township 19N, Range 12EIM, Tulsa County, Oklahoma	Center of Facility and South of F02
F02	NE¼, NW¼, NE¼, Section 15, Township 19N, Range 12EIM, Tulsa County, Oklahoma	North of facility along North property line

SURFACE IMPOUNDMENT REQUIREMENTS

1. **Maintenance and Operation Plan (MOP) (OAC 252:616-5-2)**

For tanks and surface impoundments that contain Class I and Class II wastewater, there must be a written Maintenance and Operation Plan (MOP). A MOP may be required for other wastewater classifications based on site specific information. The MOP must be followed, updated annually, if necessary, kept on-site and be available to DEQ.

A MOP will be required for impoundments T01 and F02.

2. **Freeboard Requirements (OAC 252:616-7-1(7))**

A minimum freeboard of two (2) feet for T01 shall be maintained.

A minimum freeboard of three (3) feet for F02 shall be maintained.

3. **Wastewater Classification [OAC 252:616-1-2]**

The wastewater in impoundment T01, generated from washing down the process areas and from stormwater runoff, is classified as Class I wastewater due to concentrations of total antimony (65 µg/l) and total dissolved solids (3,320 mg/l).

The wastewater in impoundment F02 is stormwater runoff and is classified as Class III wastewater. In 2013 the top layer of sludge and soil was removed from this impoundment, this was done to clean out high levels of metals from the impoundment. After the impoundment refilled with stormwater high levels of total arsenic (130 µg/l) were found. The facility submitted additional sampling that indicates the high levels of arsenic are being caused by arsenic in the soil therefore the wastewater classification will remain Class III.

4. **Depth to Groundwater (OAC 252:616-7-1(4))**

Surface impoundments as required by OAC 252:616-7-1(4) are required to be located such that the base of the liner is at least fifteen (15) feet above the historic maximum groundwater table. The application states that the groundwater depth is between 10 and 11 feet in the area of the facility. The separation requirement is waived due to the class of wastewater and use of appropriate liners.

5. **Liner Requirements [OAC 252:616-7-2(b)]**

Surface impoundment T01 has a concrete liner. Since the wastewater being retained is Class I, it is BPJ that a concrete liner is an appropriate and compatible liner system in accordance with OAC 252:616-7-2(b).

Surface impoundment F02 has a native soil liner. Since the wastewater being retained is Class III, it is BPJ that a native soil liner is an appropriate and compatible liner system in accordance with OAC 252:616-7-2(b).

6. **Additional Requirements**

- The permit may be reopened to implement and/or require impoundment modifications, additions, extensions, and/or operational changes; monitoring and reporting; reclassification of wastes; sludge management plans; best management practices; closure plans; and/or other appropriate actions.

- At such time as surface impoundments T01 and/or F02 are to be permanently taken out of service or at such time as the contents of T01 and/or F02 pose a risk to the environment or waters of the State, the owner or operator of the facility shall follow all closure requirements contained in OAC 252:616-13.

- In all other respects, Surface Impoundments T01 and F02 shall be subject to standard conditions for surface impoundments contained in OAC 252:616, Subchapters 5, 7, and 13, including but not limited to requirements for construction, operation, maintenance, monitoring and closure.

B. LAND APPLICATION

The facility does not use land application.

C. SEPTIC TANK SYSTEM

Not applicable as stated in the permit application.

VII. DRAFT PERMIT EFFLUENT LIMITATIONS

A. GENERAL

In accordance with 40 CFR 122.44(a), (d) and (l), pollutant limitations and monitoring requirements are established in the draft permit based on the more stringent of technology-based, water quality-based or previous permit requirements. Both concentration and mass (loading) limits are established unless it is impractical to specify loading limits because of the units in which concentration limits are expressed (e.g., standard units for pH or degrees for temperature). Such loading limitations are calculated for each affected outfall using that outfall's high 30-day average effluent flow, $Q_{e(30)}$, over the period of record (see Section III.B.1) according to the following equation:

Mass loading limit *(lb/day)* = Concentration limit *(mg/l)* × $Q_{e(30)}$ *(MGD)* × 8.34

B. OUTFALL 001

The following are effluent limitations and monitoring requirements for Outfall 001.

1. Limited Parameters

Limitations and Reporting Requirements

Parameters	Technology-based		Water Quality-based		Previous Permit		Draft Permit	
	Monthly Average (mg/l)	Max Daily (mg/l)	Monthly Average (mg/l)	Max Daily (mg/l)	Monthly Average (mg/l)	Max Daily (mg/l)	Monthly Average (mg/l)	Max Daily (mg/l)
Flow (MGD)	---	---	Report	Report	Report	Report	Report	Report
Total Suspended Solids (TSS)	Report	45	---	---	---	45	Report	45
Arsenic, total	---	Report	---	---	---	Report	---	Report
pH	---		Between 6.5 - 9.0 s.u.		Between 6.5 - 9.0 s.u.		Between 6.5 - 9.0 s.u.	

2. Monitoring Frequencies and Sample Types

a. Evaluation for Performance-Based Monitoring Frequency Reductions

Performance-based monitoring frequency reductions are considered in accordance with OAC 252:690-3-91 and Chapter 3 of the CPP. Where Significant Noncompliance (SNC) with permit limitations has been exhibited during the period of record, the facility is ineligible for any performance-based monitoring frequency reduction for the affected pollutant. The facility has not discharged any wastewater during the last permit cycle. Therefore, the facility is ineligible for any performance-based monitoring frequency reduction.

b. Monitoring Requirements and Sample Types

Based on monitoring requirements in OAC 252:690-3-90 through 3-91, and incorporating the results of the evaluation for performance-based monitoring frequency reductions in Section VII.B.2.a, monitoring requirements for Outfall 001 beginning at the effective date of the permit are as follows.

Monitoring Requirements and Sample Types – Outfall 001

Parameters	Draft Permit	
	Frequency	Sample Type
Flow	1/month	Estimated
TSS	1/month	Grab
Arsenic, total	2/month	Grab
pH	1/month	Grab

D. BACKGROUND MONITORING (MONITORING POINT 999)

Not Applicable

E. COMPLIANCE SCHEDULE

Not Applicable

VIII. SUMMARY OF CHANGES FROM PREVIOUS PERMIT

- Added a report requirement for the monthly average total suspended solids (TSS).

IX. ADMINISTRATIVE RECORD

The following sources were used to prepare the draft permit and constitute a part of its administrative record.

A. APPLICATIONS

OPDES Permit Application No. OK0044156 (Forms 1, 2C, and 2SI), received 08/04/20.

B. CLEAN WATER ACT CITATIONS

Sections 301, 303(d), 305(b), 402(a) and 402(o).

C. 40 CFR CITATIONS

40 CFR Parts 122, 124 and 136.

D. STATE LAW, STANDARDS, AND RULES AND REGULATIONS

- Oklahoma Pollutant Discharge Elimination System (OPDES) Act, 27A O.S. §2-6-201 *et seq.*
- OAC 252:606, Discharge Standards (DEQ).
- OAC 252:616, Surface Impoundment Standards (DEQ).
- OAC 252:690, Water Quality Standards Implementation (DEQ).

- OAC 785:45, Oklahoma Water Quality Standards (OWRB).
- OAC 785:46, OWQS Implementation (OWRB).
- Oklahoma Continuing Planning Process (CPP) Document (DEQ).

E. MISCELLANEOUS

- 2018 Integrated Report, Appendix C (303(d) List) and Appendix E (completed TMDL's).
- 2001 Beneficial Use Monitoring Program (BUMP) Report (OWRB).
- Permit file, OPDES Permit No. OK0044156, including selected biomonitoring laboratory reports.
- Integrated Compliance Information System (ICIS) data retrieval, February 1, 2016, through June 30, 2020.

X. REVIEW BY OTHER AGENCIES AND FINAL DETERMINATION

A public notice which includes a link to the DEQ webpage where the draft permit may be viewed will be sent to various Federal and State agencies upon posting the draft permit on the DEQ webpage. If comments are received from these agencies or other State or Federal agencies with jurisdiction over fish, wildlife, or public health, the permit may be denied or additional conditions may be included in accordance with regulations promulgated at 40 CFR 124.59.

The public notice describes the procedures for the formulation of final determinations.

COVANTA TULSA

RESOURCE RECOVERY FACILITY

Closure Plan
For
Covanta Tulsa
2122 South Yukon Avenue
Tulsa, Oklahoma 74107

CLOSURE PLAN

January 13, 2023

TABLE OF CONTENTS

1.0 FACILITY DESCRIPTION

Legal Description:
Northerly nine hundred feet (900') of the easterly one thousand eighty-five feed (1085') of NW ¼ of NE ¼ of Section 15, Township 19 North, Range 12 East, Tulsa County, Oklahoma

Project Location
The site is located at the southwest corner of the intersection of 21st and Yukon Streets and encompasses approximately 20 acres. Site access is provided from Yukon Avenue. Downtown Tulsa is located approximately 1.5 miles northeast of the facility site. The facility is located within the Tulsa City limits.

Land Use:
The site is zoned medium industrial. The area is industrialized with an oil refinery to the north, another to the southeast and several galvanizing and heavy metal fabrication facilities to the south and east and a pipeline terminal station to the west. The nearest residence is approximately ½ miles due east. An eight-lane expressway, a four-lane major thoroughfare, and six sets of railroad tracks separate the facility location and the residence.

Operations:
The Covanta Tulsa Facility began commercial operation in June 1986. It includes three municipal waste combustors, each with a nominal rating of 375 tons per day of solid waste. The energy obtained from the combustion of solid waste is used to generate energy in the form of steam or electricity or both. Facility operations reduce waste volume by approximately 90 percent, thereby reducing landfill space requirements. The inventory of fuel in the pit averages 2500 tons per day.

1.1 PIT DESCRIPTION

The refuse pit divides into eight bays along its length running east to west. This helps organize refuse delivery by designating specific areas for truck dumping. Although the bays are not physically separated, assume that they run through the width of the pit to the rear wall. In addition, assume that the pit further divides into three equal rows across its width. These rows; front, middle, and rear, are each slightly wider than a fully opened crane grapple. (Figure. 1.1-1)

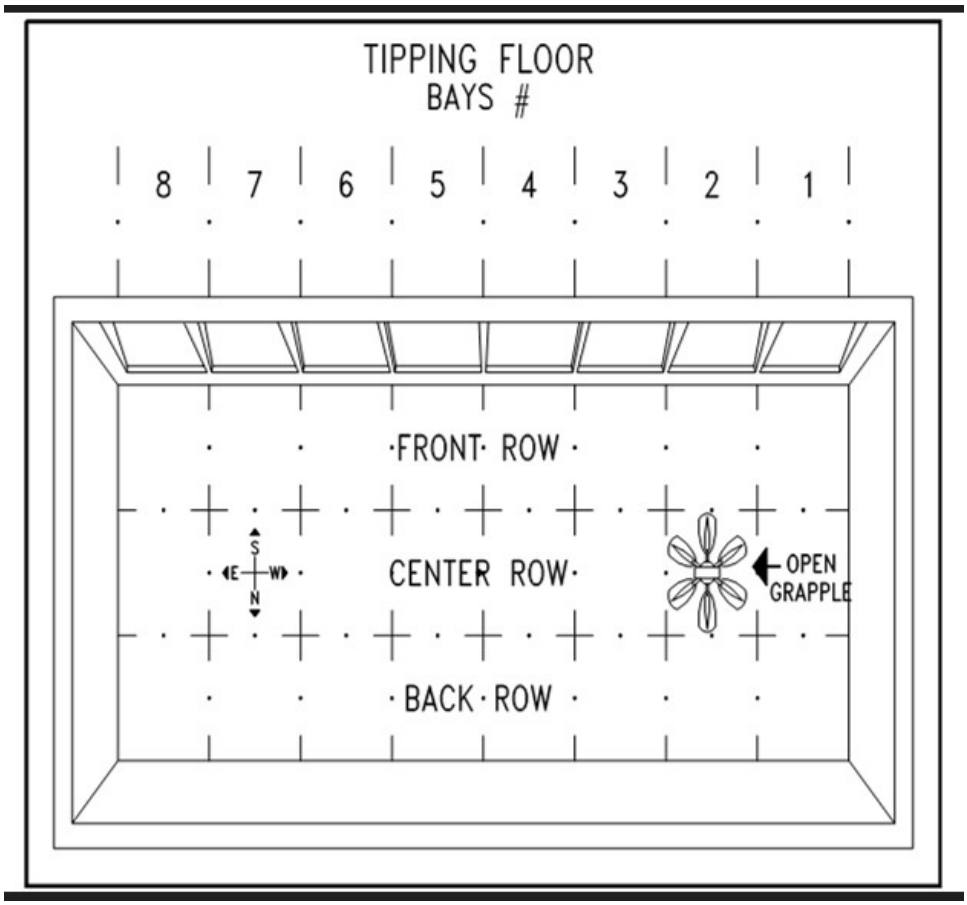


Figure 1.1-1: Tipping Floor

1.2 PURPOSE OF PLAN SOLID WASTE RULE (252:515-25-1)

This plan identifies the activities that will take place for the closure of the facility, a description of how each activity is expected to be performed, and schedule for completing all activities. Appendix A is a drawing of the facility showing the areas and equipment for clean up. In addition, the plan will cover the following:

- Estimate of the maximum inventory of waste ever on-site over the active life of the facility
- Detailed plans for identifying and removing from the site all equipment, temporary buildings and other improvements not designated as permanent in the permit application
- Disposing of final wastes and affected soils;
- Decontamination of facility structures
- Redesigning final closure in accordance with existing site conditions and applicable rules;
- Preparing final closure certification and other required documents and notices; and
- Performing any other tasks necessary to achieve final closure of the site.

1.3 FINAL CLOSURE

Oklahoma Department of Environmental Quality (ODEQ) will be notified in writing prior to beginning final closure of the facility.

Closure activities shall begin no later than 90 days after final receipt of wastes at the facility.

Closure activities shall be completed according to this plan within 180 days after closure activities are initiated.

A Certification of Final Closure shall be submitted to the ODEQ after completion of final closure. The Certification shall:

- Be signed by the owner/operator;
- State that the facility was closed according to the approved closure plan, the permit, and applicable rules.
- Contain a closure report with related drawings, plans or specifications
- describing how closure was performed; and
- Indicate whether inspect of soil, groundwater and surface water monitoring has shown the presence of elevated levels of any constituent or if any evidence of contamination related to site operations has been found and, if so, what corrective measures were taken.
- The Certification of Final Closure shall be prepared and sealed by an independent professional engineer licensed in the State of Oklahoma.
- Upon ODEQ approval of final closure, a notice shall be recorded in the land records of the property in the county in which the facility is located, that will give notice in perpetuity that the site was used for the processing of solid waste and has been closed.
- The notice shall specify the type, location and quantity of wastes processed or disposed.
- Post signage at facility entrance that indicates the closure of the facility.

2.0 IDENTIFICATION OF SITE-SPECIFIC CLOSURE ACTIVITIES

The activities at the facility that affect the closure of the facility are as follows:

1. Refuse Pit
2. Spray Dryer Absorbers and Lime Slurry Tank
3. Fabric Filter Baghouses
4. Water treatment system
5. Carbon injection system
6. Ammonia injection system
7. Boilers, Ash Discharges and Ash Conveyance System
8. Pug mill
9. Ash sump
10. Stoker Hydraulic skids
11. Diesel, propane tanks and oils
12. Cooling tower
13. Profiled Waste Receiving and Processing Buildings and Staging Area
14. Liquid Direct Injection Tanks (LDI)

2.1 CLOSURE PERFORMANCE

2.1.1 Refuse Pit

The grapple will be used to remove refuse from the pit to the lowest elevation practicable. Any residue remaining in the bottom of the pit, will be removed by lowering a bobcat into the pit and scooping up the remaining refuse. All refuse will be removed from any beams or other areas that may have collected refuse. The pit and the grapple will then be bleached. A cyclone fence will be installed in front of the pit to prevent vectors from entering the pit.

2.1.2 Spray Dryer Absorbers and Lime Slurry Tank

The SDAs will be flushed with acid to remove all lime residues. The lime slurry tank will be drained and flushed with acid. The lime feed screw conveyors will be cleaned, and all lime will be removed. Any waste streams generated will be appropriately managed in accordance with state and federal regulations.

2.1.3 Fabric Filter Baghouses

The bags will be removed and disposed of in accordance with state and federal regulations.

2.1.4 Water Treatment System

The water treatment chemicals will be removed and either returned to the original supplier or disposed of in accordance with all state and federal regulations.

2.1.5 Carbon Injection System

The carbon will be removed and either returned to the original supplier or disposed of in accordance with all state and federal regulations.

2.1.6 Ammonia Injection System

The ammonia will be removed and either returned to the original supplier or disposed of in accordance with all state and federal regulations.

2.1.7 Boilers, Ash Discharges and Ash Conveyance System

The inside of the hoppers and boilers will be cleaned to remove all ash. The ash dischargers will be cleaned and all ash will be removed. All ash collected from these areas will be disposed of in accordance with all state and federal regulations.

2.1.8 Pug Mill

The pug mill will be cleaned and flushed with acidic acid. Solid waste and water waste will be disposed in accordance with all state and federal regulations.

2.1.9 Ash Sump

The ash sump will be vacuumed out and the water disposed of in accordance with all state and federal regulations. Ash will be removed and disposed of with the rest of the ash in accordance with all state and federal regulations. The sump will be flushed so that there will be no ash residue.

2.1.10 Stoker Hydraulic skid

The hydraulic oil will be drained from each tank and disposed of in accordance with all state and federal regulations.

2.1.11 Diesel, Propane Tank and Oils

The products will be removed from both of the tanks and either returned to the supplier or disposed of in accordance with all state and federal regulations. New oil drums will be returned to the supplier and partial drums will be disposed of in accordance with all state and federal regulations.

2.1.12 Cooling Tower

The cooling tower will be drained and flushed with clean water. There will be a cyclone fence around the base of the tower to prevent access by vectors.

2.1.13 Profiled Waste Receiving and Processing Building and Staging Area

Any remaining non-MSW materials, including RMW, will be removed from the Profiled Waste Receiving and Processing Buildings, including the Staging Area and transported to a permitted facility for processing. Areas within these building with contact to non-MSW materials will be

disinfected with bleach. Additional waste streams remaining in these areas will be disposed of in accordance with all state and federal regulations.

2.1.14 Liquid Direct Injection (LDI)

LDI waste will be removed from all tanks on site and flushed to remove residual waste. All wastes from this process will be pumped into a tanker truck suited to this purpose and transported to a permitted facility for processing. All wastes generated during this process will be disposed of in accordance with all state and federal regulations.

3.0 CLEANUP PLANS

3.1 SCHEDULE FOR COMPLETING ALL ACTIVITIES

Closure activities shall be completed according to this plan within 180 days after closure activities are initiated.

3.2 MAXIMUM INVENTORY

An estimate of the maximum daily inventory of MSW and non-MSW waste on-site over the active life of the facility is 4000 tons.

3.3 PLANS FOR SITE CLEANUP

3.3.1 Identification and removal of all equipment, temporary buildings and other improvements not designated as permanent in the permit application.

Appendix B is a list of the equipment kept on site. The list shows the status of the equipment for ownership and what will be done with each piece of equipment. The equipment list is the equipment on-site at the time of the writing of this plan. The list will be updated before closure begins.

3.3.2 Disposing of final wastes and affected soils.

Soils should not be affected with this type of facility because the waste does not touch the soil. The waste is stored in a concrete lined pit before it is processed. All final ash and boiler cleanout will be disposed of in accordance with all state and federal regulations.

3.3.3 Decontamination of facility structures.

Section 2.1 describes the areas of the facility that would be cleaned and the decontamination process. After all these areas are cleaned and decontaminated, the concrete around the plant will be washed and all contamination flushed off of the concrete.

3.3.4 Redesigning final closure in accordance with existing site conditions and applicable rules;

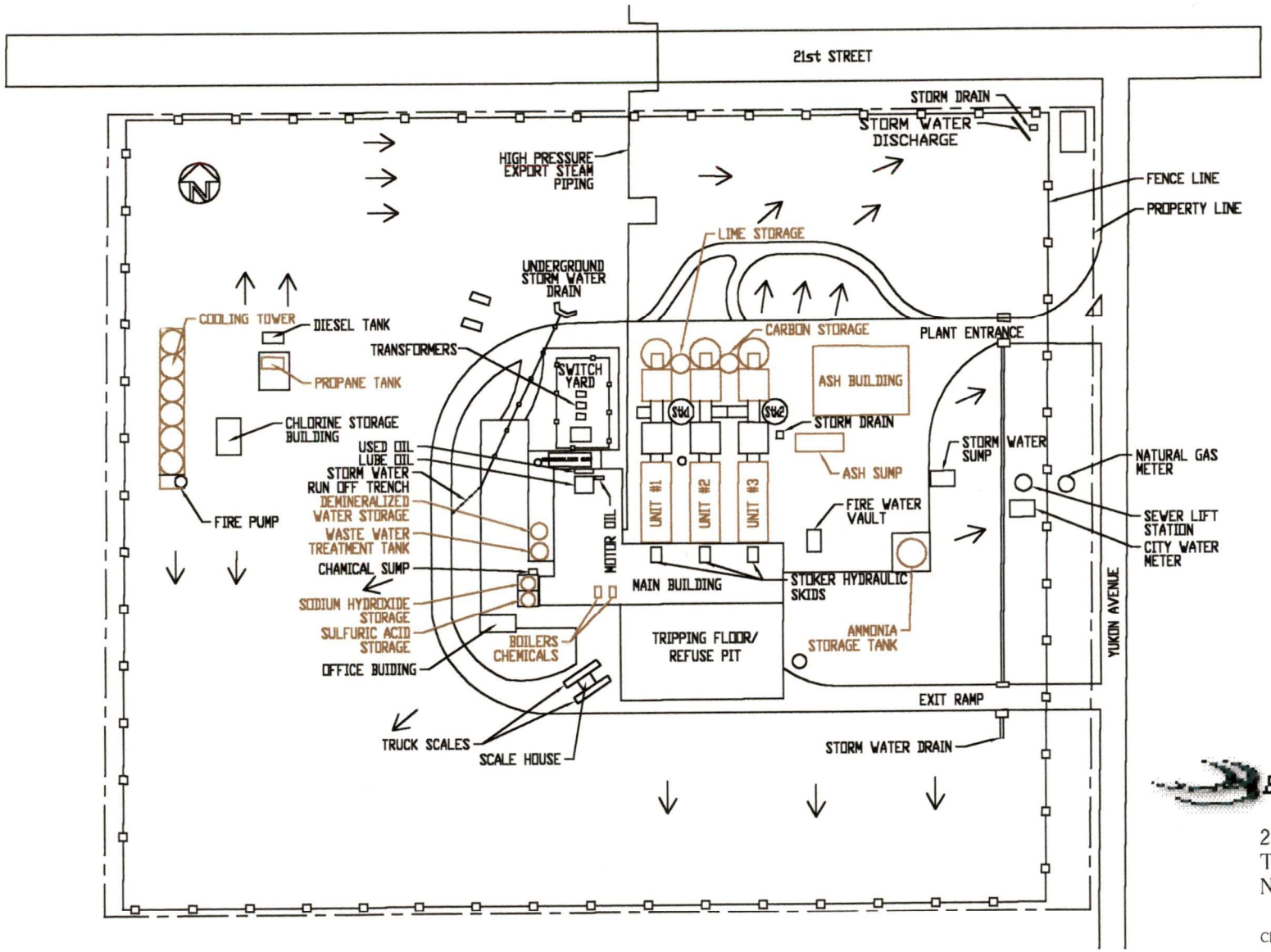
At the time of the closure, before closure begins, the site conditions and applicable rules will be reviewed and the plan will be updated. In the event that the site conditions change or there is a change in the regulations, this plan will be reviewed and updated as needed.

3.3.5 Performing any other tasks necessary to achieve final closure of the site.

This facility will not require a post closure plan. The building and all the equipment will be inspected for cleanliness prior to the notification to ODEQ that the closure is complete.

APPENDIX A

CLOSURE PLAN



Berion Operators

2122 SOUTH YUKON
TULSA OKLAHOMA
NOT TO SCALE

CREATED OCTOBER 23, 2003

APPENDIX B

Appendix B

Covanta Corporate Equipment List Excluding Transfer Stations and CFS 2020							
Facility	ALM ID #	Equipment	Equipment Adder	Make	Model	VIN	Manufacture Year
Tulsa	MOB-MAN-1	Aerial Lift		Genie	Z-60/34 4x4		2000
Tulsa	MOB-FORK-5	Forklift		Hyster	H-50-XM	H117B23209X	2000
Tulsa	MOB-FORK-6	Forklift		Yale	GLP150ZGEGAF08	H177B23209X	2001
Tulsa	MOB-FORK-7	Forklift		Yale	2P5000	AT3540513	2015
Tulsa	MOB-FORK-8	Forklift		YALE	GLP050VXNVRE084	B875V14591M	2014
Tulsa	MOB-FORK-9	Forklift		YALE	GLP060VXEVSE093	B875B18834F	2008
Tulsa	TUL-MOB-FEL-3	Loader		Caterpillar	966G	L177B05593D	2000
Tulsa	TUL-MOB-FEL-2	Loader		Komatsu	WA-380-7	A64357	2013
Tulsa	MOB-FEL-4	Loader		SDLG (Volvo)	L918F COMPACT LOADER	VLGH918FCH0640010	2018
Tulsa	MOB-FEL-5	Loader		Volvo	L110H	0S631429	2019
Tulsa	MOB-SSL-2	Skid Steer	Loader 2	BOBCAT INC	S510/2014	NO DATA PLATE	2014
Tulsa	MOB-SWP-1	Sweeper		Tennant	800	6650-10214	2008
Tulsa	MOB-SWP-2	Sweeper		TYMCO SWEEP	600 DST-6	1HTMPAF N63H565352	2000
Tulsa	TUL-MOB-FORK-1	Telehandler		Caterpillar	TH350B	CRX10022	2005
Tulsa	MOB-TRTR-1	Tractor	Farm Tractor	KUBOTA	L3200DT	63086	2001
Tulsa	TUL-MOB-TRK-1	Truck	Pickup	Ford	F-150	1FTRX12W96NA46447	2006
							36

Appendix I – RMW Auditing Program

COVANTA Environmental Solutions

REGULATED MEDICAL WASTE (RMW) OPPORTUNITY MANAGEMENT PROCESS

Introduction

Covanta introduces a comprehensive medical waste management program. This program has the highest level of industry standards for operational safety, environmental compliance, reliability and service all with a sustainable outcome for material management.

Medical waste material is managed for disposal by energy from waste technology at Covanta facilities. Biomedical waste and medical waste that has been treated are destroyed using a highly automated feed system and produce renewable energy in the form of steam or electric power.

Covanta provides this medical waste disposal service primarily to frontline medical waste service providers with collection and transfer station assets.

Process for Managing RMW Opportunities and for On-Boarding RMW Customers

1. Conference call with Customer to review requirements of the Covanta's RMW program and gather information about the customer including:

    a) Acceptable materials
    b) Packaging requirements
    c) Acceptable container types
    d) Transportation requirements
    e) Company background and structure
    f) Financial information
    g) Operations and capabilities
    h) Current medical waste disposal outlets and types of material managed

2. Completion of a Material Characterization Form (MCF) and the supplemental requirements for a RMW approval with Customer providing examples of the following:

    a) Procedures/protocols provided to RMW generators for the proper segregation of components of the RMW stream at point of generation in a healthcare facility as per Federal/State Regulations.
    b) Source segregation procedures for pharmaceuticals and non-hazardous pharmaceuticals that are commingled with sharps.
    c) Educational material used at RMW generator sites that illustrates proper source segregation of RMW and proper use of RMW packaging.
    d) Customer in-service/refresher training programs on proper source segregation of waste.

3. Initial Customer Facility Visit:
   Upon Business Development acknowledgment of above customer responses, an accompanied site visit is scheduled with a Material Compliance representative to address the following:
   a) Review business methods, perform a documented facility audit.
   b) Capture proper permitting, facility controls, internal training and equipment verifications
   c) Review of inbound waste receiving, inspection, QA/QC process, staging and repacking, outbound shipments.
   d) Determination of required conversions to meet Covanta specifications (i.e.: waste segregation, container type/size, absorbent use, and transporter, client service agreements).
   e) In person review of acceptable/unacceptable materials, QA/QC process and CES RMW Service Agreement.

4. RMW Service Agreement:

   a) All RMW Customers must sign an RMW specific service agreement with Covanta. The Waste Acceptance Criteria for RMW are clearly defined within the Service Agreement. The customer must also provide evidence of insurance as part of this process.

5. Approval of MCF and Service Agreement:

   a) After any required conversations occur and any required follow up site visits are completed- the MCF, Supplemental Requirements, and RMW Service Agreement are submitted for final approval.

6. Loads Received:

   a) Each load is accompanied by an RMW Certification (**Appendix Q**) in addition to the standard Pre-Ship Notification, and Manifest/Bill of Lading documents.
   b) The Receiving Covanta facility performs 100% audits on RMW shipments. Each Customer shipment must be accompanied by a load certification document that declares the shipment does not contain human fetal tissue (See attached). RMW deliveries are not offloaded until all required generator signed shipment documents, including the Covanta Facility Medical Waste Certification, is received at the facility.

7. QA/QC Load Inspections:

   a) Each RMW load delivered to the receiving Covanta Facility is inspected by designated QA/QC personnel. Exceptions are recorded by QA/QC staff which then triggers customer notification and corrective action. Depending upon the severity of the exception it may trigger a load rejection, customer suspension and/or automatic customer site inspection.

8. Customer Medical Waste Facility Audit:

    a) For the first year under contract the Customer's facilities are audited by the designated Material Compliance QA/QC team at a minimum of once annually- and may also be subjected to additional site visits.
    b) The customer also agrees to allow Covanta to inspect their Customers' sites if requested.
    c) For year 2 onward Material Compliance QA/QC audits occur at a frequency dependent on load inspection performance and at a minimum once per year.