



Clean Harbors Colfax, LLC
3763 Highway 471
Colfax, Louisiana 71417

Class 3 Permit Modification Request
Response to NOD # 2 and Supplemental Information

LAD 981 055 791-OP-RN-1
PER20150001

AI # 32096

June 19, 2015



Clean Harbors
 3763 Highway 471
 Colfax, LA 71417
 225.778.3645
 www.cleanharbors.com

MAIN FILE

June 19, 2015

Hand Delivered

Mr. Lewis Donlon
 Louisiana Department of Environmental Quality
 Office of Environmental Services
 Waste Permits Division
 602 North Fifth Street
 Baton Rouge, Louisiana 70802

original to JOHW
 copy to HW/Silva
 PR-12

**Re: Notice of Deficiency (NOD) # 2, Class 3 Permit Modification
 Request to Increase Hourly Treatment Rate – Facility Response
 Clean Harbors Colfax, LLC - Colfax, LA, Grant Parish
 ✓ AI# 32096/LAD981055791-0P-RN-I/PER20150001 ✓**



Attn: Ms. Lina Kruth Saale

Dear Mr. Donlon:

Clean Harbors Colfax, LLC (herein “the facility”) has received the Department’s NOD # 2 for the above referenced Class 3 permit modification request. The comments are listed below, along with the facility’s responses. As requested, this submittal includes four copies of this document and the attachments referenced below.

Environmental Assessment Statement (IT Decision Responses):

The Environmental Assessment Statement (IT Decision Responses) is enclosed as Attachment 1. It has been revised to address the Department’s comments.

Section I.A.3.a The applicant did not provide the percentage of on-site generated waste.

Response: The document has been revised to include this information.

Section I.A.3.b The applicant did not provide the percentage of off-site generated waste.

Response: The document has been revised to include this information.

Section II.D.3 Define how much will local traffic volume increase by the proposed increase in treatment.



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Response: *The document has been revised to include this information.*

Section III The applicant shall provide a narrative to justify the “No” response to this section.

Response: *The requested narrative has been incorporated into this section.*

Section III.A The applicant shall provide documentation of the referenced “numerous government studies” that demonstrate the effectiveness and efficiency of this technology.

Response: *The reference has been deleted.*

Section III.A The applicant shall provide additional information on other technologies available (e.g. traditional incineration) and provide more detailed justification on why the current technology is the “safer” alternative.

Response: *This section has been revised to provide more detail.*

Section III.C.1 Please see above comment.

Response: *This section has been revised to provide more detail.*

Section III.A.2 The applicant did not provide a description of the engineering design and operating techniques.

Response: *This section asked for the applicant to provide the engineering design and operating techniques used to compensate for any site deficiencies. As stated in the section, the facility is not aware of any site deficiencies; therefore, there are no engineering design and operating techniques used to compensate for any site deficiencies.*

Section III.D The response to this section references an attached Flow Chart. However, the flow chart was not provided to describe the sequence of technology from the arrival of waste to the end process at the facility.

Response: *A copy of the flow chart is included with this response.*

Section IV.D Since submittal of the Part B Permit Application, FEMA has reclassified most of Louisiana in regards to flood plain areas. Please update with current information.



Mr. Donlon

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Response: This section has been updated with the requested information.

Section IV.D.1.a Response does not identify how current the maps being used are in regards to making flood plain determination.

Response: This section has been updated with the requested information.

Section IV.E.3 The response to this section referenced information included in the Part B Permit Application in regards to each well. Please update the Part B Application to reflect this information.

Response: The Part B Permit Application already includes this information.

Section IV.H.2 Second paragraph contains an incomplete sentence in discussion of "Hydrology."

Response: This fragment has been deleted.

Section IV.H.5 A site map of the facility in regards to the DOTD Well Locations is needed for review.

Response: This map is included at the end of the IT Questions section.

Section V.C.2 The response provided does not address the question to this section.

Response: This section has been updated with the requested information.

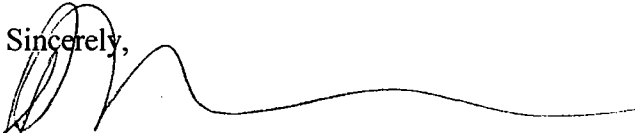
In addition to the revised "IT Questions," this submittal also includes revisions to several sections of the previous permit application as discussed during a conference call with Department personnel on April 17, 2015. Specifically, portions of Chapter 5 (including Sections 515, 517, 519, 520, 521, and 534); Chapter 15; Chapter 33; and the Waste Analysis Plan (WAP) have been slightly revised to reflect this modification request. Please note that no changes were determined to be necessary for the Ash Management Plan (included as an appendix to the WAP). No changes to the Contingency Plan were deemed necessary at this time.

Please also note the facility does not expect to add any additional equipment associated with this request; however, the facility has recently hired three (3) new employees since the approval of the Temporary Authorization under which the facility is currently operating and expects to hire one additional full-time employee in the near future.



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The facility appreciates the Department's continuing review of this request and is available to quickly respond to any additional concerns that may arise. If there are any questions or comments concerning this matter, please do not hesitate to contact me at (225) 778-3645 or via e-mail at andrews.paul@cleanharbors.com.

Sincerely,


Paul Andrews
Senior Compliance Manager
Clean Harbors Environmental Services, Inc.

Enclosures

cc: Jerry McPheron, General Manager
Matthew Sauvageau, Director Compliance

Clean Harbors Colfax, LLC
Clean Harbors

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RESPONSES TO "IT" QUESTIONS

Responses to "IT" Decision Questions

Have the potential and real adverse environmental effects of the proposed facility been avoided to maximum extent possible?

The Clean Harbors Colfax, LLC has been safely operated since it was originally permitted in 1993. At the time the facility became permitted for RCRA storage and treatment the Department required that the "IT Decision Questions" regarding siting of new facilities be answered. Based on the original responses given at the time the original RCRA permit was being considered and the subsequent operations of the facility, including environmental monitoring that has been performed on the site, the facility has demonstrated there have been no adverse environmental effects observed at the site.

A. What are the potential environmental impacts of the permittee's proposed facility?

The facility only provides RCRA (hazardous waste) storage and thermal treatment for reactive and explosive wastes at the facility. Thermal treatment of reactive wastes presents the following potential adverse effects:

- Physical injury associated with an unplanned or uncontrolled fire or explosion;
- Direct inhalation of combustion byproducts;
- Deposition of particulate matter created during the combustion process on adjacent land areas; and
- Storm water run-off.

1. What waste will be handled?

The facility will only manage RCRA reactive and explosive wastes. Some of these wastes may also carry other characteristic waste codes as a result of the formulation of the material to be processed.

The following wastes may be managed at the facility: D001; D002, D003; D004; D005; D006; D007; D008; D010; D011; D030; K044; K045; K046; P009; P048; P065; P081; P105, P112; U069; U088; U098; U105; U108; U115; U117; U133; U160; and U234

Reactive wastes that are classified due to the potential to generate cyanide or sulfide are not accepted by the facility.

a. Classes of chemicals

As indicated above the facility will only manage reactive and explosive chemicals. These wastes are normally but not limited to nitrated compounds.

b. *Quantities (hazardous and non-hazardous)*

The maximum permitted quantity of the hazardous waste that can be present at the site at any time is 55,950 pounds of net explosive weight. This quantity was determined in accordance with the Bureau of Alcohol, Tobacco, and Firearms (ATF) regulations governing the storage of explosives.

c. *Physical and chemical characteristics*

The wastes, reactive and explosive, to be stored and treated are all received from off-site generators and may be in either solid or liquid form. Therefore, the waste is stored in ATF-approved magazines until it is to be processed. In the event liquid waste is received, it will be stored in a magazine provided with adequate secondary containment.

d. *Hazardous waste classification (listed, characteristic, etc.)*

The following wastes may be managed at the facility: D001; D002, D003; D004; D005; D006; D007; D008; D010; D011; D030; K044; K045; K046; P009; P048; P065; P081; P105, P112; U069; U088; U098; U105; U108; U115; U117; U133; U160; and U234.

2. *How will they be handled?*

The waste managed at the facility will come from off-site generators and will be transported to the facility by over the road trucks. All waste activities are conducted either in storage or process areas provided with adequate secondary containment and supervision.

a. *Treatment*

The treatment units located at the facility consist of concrete or steel burning units located on a large curbed cement floor. The burners are located well within the perimeter of the concrete area to insure that potential residuals from the burning process are all contained. In addition, the facility routinely monitors the site for residuals and environmental soil samples are collected as prescribed in the current permit to determine if any deposition of residuals has occurred outside the treatment area. To date all analyses indicate that no contamination has occurred.

b. *Storage*

The waste is stored in ATF-approved and licensed storage magazines. All magazines closely follow ATF requirements for minimum separation distances that explosives can be stored in relation to one another.

c. *Disposal*

No disposal operations are conducted at the facility. All treatment residuals are evaluated and, where appropriate, they are recycled or disposed off-site.

3. *Sources of waste*

a. *On-site generation (type and percentage of total handled)*

The facility will only generate treatment residues as a result of the burning process. Some of the residues (metal) will be acceptable for recycling. This amount typically represents approximately 260,000 pounds per year. Other residues such as ash or non-recoverable metal and debris will be evaluated and shipped off as non-hazardous or hazardous waste to an approved and permitted facility. Nonhazardous waste represents approximately 140 cubic yards per year and hazardous represents 20 cubic yards per year. In total, the site-generated waste represents approximately 10% of the total of the gross amount of wastes received from off-site sources.

b. *Off-site generation (type and percentage of total handled)*

As indicated above, the facility does not generate any reactive or explosive wastes, only treatment residuals from treating off-site generated wastes. The quantity of off-site generated wastes received at the facility is up to 2,055,000 pounds per year of waste (net explosive weight). This amount represents 100% of the waste treated on-site and approximately 90% of the total waste that may be stored on-site (including the site-generated waste mentioned in the previous sub-paragraph).

4. *Where will waste be shipped if not handled at the site?*

Due to the extensive review and approval process, and specialty manufacturers who generate the waste there are no instances where waste will not be accepted and treated once it arrives at the facility as long as it meets the profile description generated during the approval process. If it does not match the approved profile the waste will be shipped back to the generator.

5. *What wastes will remain on the site permanently?*

Once Clean Harbors has decided that there is no longer a need for the facility and all storage and treatment operations have been completed, the facility will notify the Department of its intention to close. All wastes will be treated and all treatment residuals will be shipped offsite for either recycling or disposal. Once all wastes and treatment residuals have been removed, the RCRA units will be decontaminated according to the approved closure plan and the decontamination residuals will be properly disposed off-site.

B. *By which of the following potential pathways could releases of hazardous materials from the*

proposed facility endanger local residents or other living organisms?

As indicated above, the facility has conducted numerous environmental monitoring events, and all data indicate that the facility is not having an adverse effect on the environment or local residents.

1. *Air*

During the term of the existing RCRA permit, the facility conducted routine air monitoring events as specified by the permit, and the results indicated no impact on the monitoring sites, which represent the location of the maximum exposed individual. Because the theoretical emissions are so small, the facility also operates under the authority of a LDEQ small source air permit.

2. *Water*

The facility currently has an NPDES Storm Water General Permit that covers the discharge of the storm water run-off for the treatment area. This permit has been in place for the duration of the RCRA treatment operations. Historically, chemical analyses indicate that the quality of the discharge is well within permit limitations; therefore, there is no threat to living organisms in the receiving stream.

3. *Soil*

As required by the conditions of the current RCRA permit, the facility has routinely monitored the soils in the area adjacent to the thermal treatment unit. All monitoring locations that are specified by the RCRA permit were mutually agreed upon by the Department and Clean Harbors prior to initiating treatment operations. As indicated above, the results from the soil samplings do not indicate any impact to the surrounding environment.

4. *Food*

The area in and around the vicinity of the facility is mainly woodlands. The treatment and storage areas represent 43 acres located centrally in a tract of 622.80 acres. The natural buffer of site controlled woodlands and the distance of over 3/4 mile to the closest residence minimizes the potential to any agricultural impact on food supplies.

C. *What is the likelihood or risk potential of such releases?*

The facility has been designed with many environmental safeguards such as the following:

- prior to receipt of a waste it is intensively scrutinized before the waste is allowed to be shipped to the facility for storage or treatment;
- all waste handling areas are provided with secondary containment; and

- all operations are implemented by trained employees who are adequately supervised.

Therefore, the potential has been minimized to the maximum extent possible and an emergency situation is unlikely.

D. *What are the real adverse environmental impacts of the permittee's proposed facility?*

As indicated above, the facility has and continues to monitor the facility on a routine basis for environmental impact of its operations as required by its current RCRA permit. There have been no impacts observed to date from the current facility operations.

1. *Short term effects*

There have been no short term effects nor are there any anticipated.

a. *Land area taken out of system*

The land taken out of the system is approximately 2 acres that serve as the burn area. Once all treatment operations are discontinued at the site, the area will be decontaminated to ensure there is no long term environmental impact.

2. *Long term effects*

Based on the information provided above, there are no long range impacts anticipated at the facility.

II. *Does a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?*

A. *How was it determined that the facility was needed?*

Thermal treatment in open burner assemblies presents the only safe and effective mechanism for deactivating many reactive hazardous wastes. Traditional incineration technologies utilize closed combustion chambers, and the potential for explosions under such conditions precludes the use of such methodologies for this purpose. As a result, this type of operation is believed to be the most effective, efficient, and safe.

1. *Local or regional survey:*

R&D Fabricating and Manufacturing, Inc., the predecessor entity to Clean Harbors Colfax, LLC, successfully demonstrated on multiple occasions that an emergency situation would develop unless it was authorized to conduct thermal treatment on reactive wastes that were accumulating at various generating sites throughout the region. The LDEQ agreed and issued emergency permits to R&D to ensure that these wastes were properly managed. The need to manage

these wastes in this manner (thermal treatment) remains unchanged.

2. *On-site and off-site needs:*

Clean Harbors Colfax, LLC treats off-site generated reactive wastes.

3. *Regional solid waste management benefit:*

Clean Harbors Colfax, LLC treats only hazardous reactive wastes.

4. *Generic survey of solid waste needs (compatibility with master plan):*

Clean Harbors Colfax, LLC treats only hazardous reactive wastes.

B. What will be the positive economic effects on the local community?

1. *How many permanent jobs will be created?*

Clean Harbors Colfax, LLC currently employs eight (8) personnel on a permanent basis.

2. *What is the expected annual payroll?*

Current annual payroll is approximately \$600,000.

3. *What is the expected economic multiplier for item B2?*

One additional local job created for each initial employee.

4. *What is the expected tax base and who receives benefits?*

Property and sales taxes are paid to Grant Parish and local communities.

C. What will be the potential negative economic effects on the local community?

1. *What are the possible effects on property values?*

No negative impacts on the value of adjacent properties have been identified, primarily because there is no disposal of waste at the facility. A 180-acre tract of land was purchased prior to 2000 across the road from the facility for approximately \$1,700/acre. This amount is up from an approximated value of \$600 to \$800/acre in the early 1990's.

2. *Will public costs rise for:*

- a. *Police protection:*

None identified - only involvement is associated with contingency

planning.

b. *Fire protection:*

None identified - only involvement is associated with contingency planning.

c. *Medical facilities:*

None identified - only involvement is associated with contingency planning.

d. *Schools:*

None identified.

e. *Roads (also see below):*

None identified - waste is delivered to the facility by truck, and the number of deliveries each day is small.

3. *Does the prospective site have the potential for precluding economic development of the area by business or industries because of risk associated with establishing such operations adjacent to the proposed facility?*

No negative impacts on the value or potential commercial or industrial use of adjacent properties has been identified.

D. *Was transportation a factor in choosing the propose site?*

The excellent road network in the vicinity was a significant factor in selecting the site.

1. *What mode(s) of transportation will be used for the site?*

a. *Truck*

Yes

b. *Rail*

No

c. *Barge*

No

d. *Other*

None

2. *What geographical area will it serve?*

Clean Harbors Colfax, LLC receives waste from local, regional, and out of state generators.

3. *By how much will local traffic volume increase?*

The facility has historically received less than 300 shipments/year. This number is not expected to increase in a way that significantly affects traffic patterns since the facility has typically limited the amount of waste it received in each truck shipment to well below the capacity of the vehicle. For purposes of this request, the total number of shipments (trucks) is not expected to exceed 500 per year.

- a. *Can local roads handle the traffic volume expected?*

The roads leading to the facility from Interstate 49 are major thoroughfares that normally deal with truck traffic. There is a one-half mile section of state Route 471 leading to the facility that should not be impacted by this volume of traffic.

- b. *Can local roads handle the weight of the trucks?*

The roads leading to the facility from Interstate 49 are major thoroughfares that normally deal with truck traffic. There is a one-half mile section of state Route 471 leading to the facility that should not be impacted by the low average weight of shipments.

- E. *What are the long term expectations of the proposed site?*

1. *Longevity of the facility?*

The overall life of the facility is projected to be greater than 25 years.

2. *Who owns the facility?*

Clean Harbors Colfax, LLC

3. *Are the owners backed by others?*

Clean Harbors Colfax, LLC is a wholly owned subsidiary of Clean Harbors Disposal, LLC which is a subsidiary of Clean Harbors Environmental Services headquartered in Norwell, Massachusetts.

4. *When is closure expected?*

The anticipated closure date is scheduled for July 1, 2024. Depending on market

conditions and status of the regulations, this date may be revised.

5. *Who is responsible for the site after closure?*

The closure plan ensures that no hazardous wastes remain following closure (clean closure will be achieved). Therefore, no post-closure care or monitoring will be required, and no restrictions on future use are anticipated.

6. *What assurances will there be that the site will be closed in accordance with the plan?*

In accordance with the existing operating permit and in anticipation of the renewal of that permit, the facility will be closed in accordance with the approved closure plan. The facility provides adequate financial assurance to ensure that the funds are available to close the facility in accordance with the approved Closure Plan.

7. *What financial assurances will be established to demonstrate the ability to handle problems after closure?*

The closure plan ensures that no hazardous wastes remain following closure (clean closure will be achieved). Therefore, no post closure care or monitoring will be required, and no restrictions on future use are anticipated.

8. *Who certifies the site is properly closed?*

In accordance with the approved closure plan, closure will be certified by an independent Louisiana registered Professional Engineer.

9. *How are people protected from unwittingly buying land after closure?*

The facility will be clean closed, so there will be no restrictions on future use of the property. No waste will remain on-site.

- a. *Is the closed facility recorded in the deed?*

In accordance with the approved closure plan, the facility will achieve clean closure; therefore, no notations or restrictions on the deed will apply.

- b. *What future uses are possible?*

No restrictions on future use are anticipated.

- III. *Are there alternative projects which would offer more protection to the environment than the proposed facility without / unduly curtailing non-environmental benefits?*

No. As discussed in the text below, the facility has previously evaluated other

treatment and disposal alternatives for these types of waste and due to existing regulatory restrictions, other alternatives are not feasible. In addition, since the facility is an existing operation, and no known environmental impacts have occurred, alternate projects to accomplish the same outcome are not practical.

A. *Why was this technology chosen (e.g., incineration over landfilling)?*

Incineration units are not designed to handle this type of material. Landfilling is not possible without treatment due to Land Disposal Restrictions (LDR).

1. *Are other technologies available?*

Traditional incineration technologies are not an option for deactivating the reactive wastes managed by Clean Harbors Colfax, LLC because of the potential for unplanned explosions under the confined conditions within an enclosed incinerator chamber. The only safe alternative is controlled open combustion such as the thermal treatment units used by Clean Harbors Colfax, LLC. The facility believes this option is safer because it is conducted outside and does not potentially blow up or significantly damage an enclosed incineration facility. The facility is not aware of any other technologies that might accomplish this same outcome as the thermal treatment currently performed at Clean Harbors Colfax, LLC.

2. *Describe the engineering design and operating techniques used to compensate for any site deficiencies.*

One of the primary reasons for selecting the site was the ideal setting for the operation. There are no inherent site deficiencies to hinder safe and environmentally sound operations.

B. *Is the proposed technology an improvement over that presently available?*

The Louisiana Hazardous Waste Regulations specify deactivation as the treatment standard for reactive waste prior to land disposal. The characteristics of the reactive wastes managed by Clean Harbors Colfax, LLC are those capable of detonation or explosive reaction if subjected to a strong initiating source if heated under confinement, those capable of detonation or explosive decomposition or reaction at standard temperature and pressure, those capable of reacting violently with water, or those which are classified as forbidden, Class A, or Class B explosives as defined in LAC 33:V.101. Controlled open combustion in thermal treatment units such as those used by Clean Harbors Colfax, LLC is the only safe method of treatment for these wastes; therefore, there are no alternatives for deactivating reactive wastes which would offer more protection to the environment than the technology employed by Clean Harbors Colfax, LLC.

C. *Describe the reliability of technology chosen*

1. *Past experiences:*

Clean Harbors Colfax, LLC was established to treat (deactivate) the wastes described in Part B of Question II so that the residues could be safely land disposed or recycled. Traditional incineration technologies are not an option for deactivating the reactive wastes managed by Clean Harbors Colfax, LLC because of the potential for unplanned explosions under the confined conditions within an enclosed incinerator chamber. The only safe alternative is controlled open combustion in thermal treatment units such as those used by Clean Harbors Colfax, LLC. The facility believes this option is safer because it is conducted outside and does not potentially blow up or significantly damage an enclosed incineration facility. The facility is not aware of any other technologies that might accomplish this same outcome as the thermal treatment currently performed at Clean Harbors Colfax, LLC.

2. *Environmental impacts:*

A risk assessment was completed in 1991 prior to constructing and operating the facility. No adverse environmental impacts associated with the operation of the facility were identified. Through a subsequent environmental assessment conducted in 1993, the facility confirmed that no unacceptable adverse environmental impacts could be identified. Further, air monitoring and soil sampling by the facility in accordance with the conditions of the hazardous waste permit have not identified any real adverse environmental effects of the facility (it is noteworthy that the facility is no longer required to conduct air monitoring).

D. *Describe the sequence of technology used from arrival of waste to the end process at the facility (flow chart).*

1. *Inspection of waste*
2. *Unloading*
3. *Storage*
4. *Treatment*
5. *Separation of residuals requiring further handling*
6. *Off site disposal of treated residuals (recycle or disposal)*

See Attached Flow Chart.

E. *Will the facility replace an outmoded/worse polluting one?*

The only safe methodology for deactivating the reactive wastes managed by Clean Harbors Colfax, LLC is controlled open combustion in units such as the thermal treatment assemblies used by the facility; therefore, there are no

alternatives for deactivating reactive wastes which would offer more protection to the environment than the technology employed by Clean Harbors Colfax, LLC.

- F. *What consumer products are generating the waste to be disposed? Are there alternative products that would entail less hazardous waste generation?*

Most of the waste received by Clean Harbors Colfax, LLC is generated by defense industry contractors and Department of Defense facilities. The primary consumer product that is treated at the facility is automobile air bag inflators, small arms ammunition manufactures and fireworks manufacturers. Alternative-technology is replacing sodium azide propellants with compressed inert gas heated with smaller quantities of non-sodium azide propellant.

- IV. *Are there alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits?*

Storage and treatment of reactivities and explosives has been conducted at this location since 1984 when R&D Fabricating and Manufacturing, Inc. first began operations. The reason that this site was selected over other candidate sites is the configuration of the land tract, which provided for establishing remote internal treatment and storage areas situated well away from the facility entrance and administrative offices.

- A. *Why was this site chosen?*

See explanation directly above.

1. *Specific advantages of the site:*

The layout of the land tract was especially conducive to orient the actual treatment area centrally on the site and establish as large a buffer zone as possible.

2. *Were other sites considered or rejected?*

The R&D operations were established and ongoing for several years. The development of the original RCRA Part B Permit and siting requirements were complied with easily. Based on the location, past history of the site in regard to compliance with both state and federal regulations, and accessibility but yet rural site environmental conditions there was no need to seek additional sites as candidates.

3. *Is the location of the site irrevocable; i.e., would denial of the permit based on the site preclude the project?*

The facility is currently fully permitted as a storage and treatment facility which has a history of compliance with regulatory requirements, and no environmental impacts have been indicated. In the event that the permit

is denied, the capital investment already invested in the property and improvements, approximately \$8,000,000, would be lost and obtaining additional funds for no apparent environmental benefit at a new location would be very difficult to justify.

B. *Is the chosen site in or near environmentally sensitive areas?*

The treatment and storage facility is not located in or near environmentally sensitive areas.

1. *Wetlands*

The treatment and storage areas were located so as to maintain a maximum distance from wetland areas not to impact wetland areas in general vicinity.

2. *Estuaries*

There are no estuaries on or near the site.

3. *Critical habitat*

There are no known endangered species or critical habitats in the vicinity of the facility. As a matter of fact, the large buffer zone created by the facility in relation to the actual storage and treatment area is environmentally beneficial in that it creates additional habitat.

4. *Historic or culturally significant areas*

There are no culturally significant areas located in the vicinity of the facility.

a. *Indian mounds*

There are no Indian mounds located on or near the facility property.

b. *Antebellum houses*

There are no Antebellum homes located on or near the facility property.

c. *Tourist attractions or facilities (e.g., bed and breakfast inns)*

There are no tourist attractions or facilities located on or near the facility property.

d. *Campgrounds and Parks*

There are no campgrounds or parks located on or near the facility property.

C. *What is the zoning and existing land-use for the prospective site and nearby areas?*

Currently, there are no zoning requirements implemented in Grant Parish. Primary land use within two miles of the facility is rural; the closest farmland is approximately two miles from the facility boundary. The estimated population within a two-mile radius of the site is 150 people.

1. *Is the site located near existing heavy industrial, chemical process or refinery operations?*

The facility is not located near existing heavy industrial, chemical process or refinery operations.

2. *Is there a precedent for chemical contamination near the site or is the soil and water pristine?*

Currently there is an existing solid waste management unit located on the property. It is located in the area of the old burn units that were operated prior to the existing permitted facility, prior to 1993. The environmental safeguards now in place at the current treatment units were not available to the old burn units. The facility is in the process of investigating the old burn area, and once all necessary environmental data is collected, a mutually agreed to remediation solution will be implemented.

3. *Is the area particularly noted for its esthetic beauty?*

The facility as well as the surrounding land use is located in a very rural wooded area. Every precaution has been taken to preserve the ecological diversity in the area. Timber companies own and tree farm much of the land adjacent to the facility, so the area, except for the Clean Harbors site is subject to be clear cut as timber matures to pulp wood or saw timber.

D. *Is the site flood prone?*

The storage and treatment facility is not located within a flood prone zone as indicated in the Part B Permit application.

1. *Is the site in a flood plain?*

According to the Federal Emergency Management Agency (FEMA), the facility is located above the current 24-hour 100-year flood plain. This conclusion is based on maps available on-line as of June 2015. Panel # 22043C0208D depicts this area and shows that the entire facility is in Zone X (500-year flood area) and is not considered at risk from flooding.

This drawing and subsequent updates can be found at <https://msc.fema.gov/portal/advanceSearch#searchresultsanchor>.

a. *How current are the maps used to make flood plain determinations?*

FEMA, the agency charged with designation of flood plains and flood-prone areas, has issued maps that indicate that the facility is in no jeopardy of being inundated by 100-year floods (based on maps that are available on-line as of June 2015).

b. *What is the elevation of the site?*

The portion of the existing facility that is used to store and treat wastes is approximately 175 feet msl.

c. *Is diking required or desired to provide flood protection?*

The facility is above the 100-year flood plain; therefore no diking is required.

(1) *What is the design height of the dike?*

This requirement is not applicable.

(2) *How is the dike protected from erosion?*

This requirement is not applicable.

(3) *What frequency and design storm was used?*

A 24-hour 25-year storm was used to determine the flood potential at the site.

(4) *Is access to the site over or through dikes?*

This requirement is not applicable.

2. *It the site hurricane vulnerable?*

Hurricane paths have infrequently crossed Grant Parish since 1900; however, wind speeds were below hurricane strength.

a. *Is the site in an area subject to storm surge?*

Due to the inland location of the facility and Grant Parish, there is no potential for the area to be subject to storm surges.

b. *What are the design storm specifications?*

As mentioned above, hurricanes that have traversed Grant Parish in the past have winds less than hurricane force and the design specifications for the treatment area have been set for a 24-hour 25-year storm.

c. *Should damage from wave action be considered?*

No. This requirement is not applicable.

d. *For what levels of wind speed is the facility designed?*

The storage and treatment units consist of ATF approved magazines and concrete units which would be unaffected by the expected with severe wind loading. There were no specific criteria used in constructing the buildings outside of normal building code requirements.

E. *Is groundwater protected?*

As indicated earlier, the regulated units that process and treat wastes are secondarily contained, and all liquids are managed in accordance with Part B Permit required conditions. The facility does not believe that groundwater will be negatively impacted by its operations.

1. *Are aquifers or recharge area underlying the site used for drinking water?*

In light of the information indicated above, there are aquifers located below the site that are used for drinking water; although protected by natural barriers as well as man made barriers.

2. *What is the relationship of the site to the water table?*

The water table aquifer is located at approximately 152 feet msl or approximately 35 feet below the elevation of the treatment and storage units.

3. *What wells exist in the area?*

There are eleven water wells located within two miles of the facility. Information is included in the Part B Permit application on the specifics on each well.

4. *What is the flow rate and direction of the groundwater?*

The flow direction of the aquifer is south-southeast at a flow rate of approximately 10 feet per year.

5. *What is the groundwater quality in the underlying aquifers?*

The ground water quality is considered to be typical for the region. More detailed information on water quality can be found in Section H of this document.

6. *Is there a hydraulic connection between the aquifers?*

There is limited interconnection between the lower and upper aquifers through interbedded sands and clays.

F. *Does the prospective site pose potential health risks as defined by proximity to:*

1. *Prime agricultural area (crop and pasture land)*

The facility is approximately two miles from the nearest farmland; therefore, there is no potential risk associated from operations at the site.

2. *Residential area*

The closest resident to the site is approximately 3,500 feet from the storage and treatment area.

3. *Schools or day care centers*

There are no schools and day care centers located in the vicinity of the site.

4. *Hospitals or prisons*

There are no hospitals or prisons located in the vicinity of the facility property.

5. *Public buildings or entertainment facilities*

There are no public buildings or entertainment centers located in the vicinity of the facility property.

6. *Food storage area*

There are no food storage areas located in the vicinity of the facility property.

7. *Existing community health problems that may be aggravated by operation of additional hazardous waste disposal capacity.*

There have been no documented community health related problems in

the area. The facility is located in attainment area for air pollutants.

G. *Is air quality protected?*

The facility has routinely collected air monitoring data over the life of the existing permit, and no impacts were indicated as result of these monitoring events. The site currently operates under the authority of an LDEQ small source air quality permit.

1. *Is the site within an ozone or non-attainment area?*

The facility is located in an attainment area for air pollutants including ozone.

2. *What contaminants are likely to be generated by the site?*

Based on the proposed waste burn rates and materials expected to be treated, the facility air permit (1120-00010-04) calculates the following emissions:

PM-10	4.80 tons per year
N0x	38.90 tons per year
VOC	0.17 tons per year
CO	8.25 tons per year

3. *What protection is afforded from each contaminant generated by the site?*

Based on the low emission rates from the facility, the LDEQ does not require any engineering controls but does place administrative controls on the operation by restricting the throughput for the burn units.

4. *What is the potential for unregulated emissions?*

There is no potential for unregulated emissions from the burn units as long as the facility complies with the regulatory restrictions for the types and amount of waste burned at the site.

5. *What plans are implemented to provide for odor control?*

The wastes that the facility processes do not have or create offensive odors, and there is no need to implement odor controls. The facility has operated since 1984, and as far as the facility is aware, no odor problems have ever been alleged.

6. *Who will be affected by emissions?*

Due to the low emission rates generated by the burn units, there will not

be any receptors down wind of the facility who will be affected by the emissions.

a. *What is the direction of the prevailing winds?*

The prevailing winds are primarily out of a westerly direction.

b. *Describe the expected frequency of "bad air" conditions?*

Because the area is located in an attainment area and atmospheric inversions are not anticipated, "bad air" days are not applicable for the facility.

7. *Describe the control of vapors at various stages of the process.*

The only potential for the facility to release vapors to the atmosphere is from the burn units. Based on the low emission rates from the facility, the LDEQ does not require any engineering controls but do place administrative controls on the operation by restricting the throughput for the burn units. There is no potential for unregulated emissions from the burn units as long as the facility complies with the regulatory restrictions for the types and amount of waste burned at the site.

H. *Have physical site characteristics been studied; what has been done in terms of a geo-technical investigation?*

The site has been studied thoroughly during the initial RCRA Part B Permit application and detailed in the 1994 Environmental Assessment Report.

1. *Site geology*

Regional Geology

The site is approximately 3.5 miles north of Colfax. According to the Geologic Map of Louisiana (1984), the site is underlain by Quaternary Pleistocene Age soils (>10,000 years B.P.). The presence of faults in these soils does not indicate that there has been seismic activity within Holocene time.

There are no known major faults defined in Grant Parish according to the publication entitled, Earthquakes in Louisiana, by Donald Stevenson and Richard McCulloh (Louisiana Geological Survey Public Information Series No. 7). The Geologic Map of Louisiana (1984) depicts the outcropping geologic formations in Grant Parish and does not indicate the presence of faults of any age in Grant Parish within 5 miles of the site.

The publication, Geology of Grant and LaSalle Parishes (Louisiana Geological Survey (LGS) Geological Bulletin No. 10, 1938) indicates one probable fault in T.7 N., R.1.E at the base of the Jackson Group (Upper

Eocene) at 500 to 1,000 feet below mean sea level. This fault is not apparent in the overlying Catahoula Formation (Miocene) and therefore must be older than the Miocene age strata. Marginal folding and associated faulting is described as occurring from post-Miocene to late Pleistocene time. The Geological Map of Grant Parish in LGS Bulletin No. 10 does indicate the presence of faults in the Pleistocene outcrop underlying the site.

Fault structures may be visibly identified as straight or gently curving lineaments (linear features) from aerial photographs. An aerial photography company (Gulf Coast Aerial Mapping) was asked to search for historical and recent photographs of the site and within a 5-mile radius of the site. None were available. Recent aerial photographs were printed from the Louisiana Department of Natural Resources web site. Two different scales were printed for the 5-mile radius and 3,000-foot radius. Examination of this photograph for lineaments indicative of fault scarps within 5 miles or a 3,000-foot radius of the site did not indicate evidence of fault structures. A series of adjoining photographs were taken to the Louisiana State University Geology Department and viewed under a stereoscope. Stereoscopic vision creates a three-dimensional effect to see length, width and depth. Fault lineaments or scarps with relief would be discernible. No fault structure was evident within 5 miles or a 3,000-foot radius of the site.

Faults are typically indicated by linear or gently curving fault-lines with offset from the upthrown side to the downthrown side so topographic relief is apparent. The site slopes in numerous directions toward the lower areas in what appears to be sinuous erosional features. No distinct offset relief in a linear or gently curving pattern is evident.

Site Geology

Two distinct water bearing zones separated by fractured clay layers are present beneath the site. The water bearing zones are described as the upper aquifer and lower aquifer. The upper zone sand formation is not continuous across the site and appears to be a sand channel that trends northwest to southeast. The lower zone sand appears to be continuous across the site.

2. *Hydrology*

The operations area is adjacent to the highest topographic point of the area, approximately 200 feet mean sea level, with three primary drainage features discharging stormwater from the storage and treatment units. Discharge from the thermal treatment area flows into the retention pond and the retention pond drains north toward an intermittent stream that flows northwest. Additional tributaries converge into Summerfield Branch approximately 0.6 miles west of Highway 471.

The second drainage feature directs storm water flow from the western corner of the facility. This channel drains into Summerfield Branch west of Highway 471.

Storm water from the southeastern portion of the facility flows to an intermittent stream that flows into a wetland area near the property boundary. Some facility roads and five storage magazines drain into this natural channel.

The nearest named surface water body is Summerfield Branch, which is approximately 0.5 miles to the northwest from the site boundary. Summerfield Branch flows approximately 2 miles northwest into Bayou Grappe. Bayou Grappe meanders from northwest to southeast and eventually merges with the Red River.

3. *Topography*

The operations area is adjacent to the highest topographic point of the area, approximately 200 feet mean sea level. The topography slopes downward along three primary drainage features to approximately 150 feet mean sea level.

4. *Soil properties*

Surface soils are non-uniform and generally consist of several inches of gray sandy loam topsoil overlying reddish brown, red or gray sands, clayey sands, sandy clays or clays. Sand pockets and iron oxide staining are scattered throughout the soils. As depth increases, the soils become more consolidated.

According to a geotechnical investigation, the upper sandy soils possess only moderate shrink/swell potential that may occur as a result of seasonal moisture variations. The deeper clays have very high plasticity indices; however, swell potential is minimized since the site is in an area of fairly high annual rainfall, which maintains an equilibrium soil moisture.

Soil samples of clays from 3-108 feet below ground surface were tested for permeability. Permeability ranged from 8.6×10^{-7} to 4.0×10^{-5} centimeters/second.

The storage, preparation and treatment areas have secondary containment to prevent disposal of hazardous substances via runoff or infiltration. Modeling was performed to simulate a worst-case scenario of a release of hazardous substances to soil and groundwater for two possible events using the EPA-approved Vertical and Horizontal Leaching Model (VHS). One is an instantaneous breach of a burner pad allowing for the direct release to the unsaturated zone and then by

percolation to the saturated (groundwater zone). The second is the complete leaching of hazardous substances from the surface soil surrounding the concrete containment pads. Neither of the scenarios predicted adverse effects on ground water from these theoretical releases.

5. *Aquifer location*

Regional Groundwater

The water well search was conducted within a 3-mile radius of the center of the site to include the boundaries within the required 2-mile radius. Thirty-seven wells were identified. Of these fourteen (14) are currently used for potable water as public supply, stock or domestic use. The following table summarizes the aquifer and well depth below ground surface (bgs) sorted by aquifer:

DOTD Well No.	Aquifer	Depth (ft, bgs)
G-62	Red River Valley Alluvial (112RRVA)	25
Na-158	Red River Valley Alluvial (112RRVA)	108
G-87	Red River Valley Alluvial (112RRVA)	36
G-63	Catahoula (122CTHL)	35
G-75	Catahoula (122CTHL)	136
G-77	Catahoula (122CTHL)	148
G-98	Catahoula (122CTHL)	225
G-233	Catahoula (122CTHL)	90
G-234	Catahoula (122CTHL)	260
G-247	Catahoula (122CTHL)	100
G-260	Catahoula (122CTHL)	70
G-393	Catahoula (122CTHL)	75
G-321	Montgomery (112MGMR)	47
G-392	Montgomery (112MGMR)	45

As shown, the Catahoula Aquifer is predominantly used in this area followed by the Red River Alluvial Aquifer and Montgomery Aquifer.

Catahoula Aquifer

Well depths in the Catahoula Aquifer within the study area range from 35 to 260 feet bgs. Information on this aquifer was obtained from *Catahoula Aquifer Summary, Baseline Monitoring Project, FY2001, Appendix 5 of the Triennial Summary Report for the Environmental Evaluation Division of the Louisiana Department of Environmental Quality.*

The Catahoula Formation consists primarily of sands with some silty to sandy clays and overlies the regional confining clays of the Vicksburg and

Jackson groups. Within the Catahoula, fine to coarse sands are discontinuous and interbedded with silt and clay.

Recharge takes place primarily as a result of the direct infiltration of rainfall in interstream, upland outcrop areas, movement of water through overlying terrace deposits, and leakage from other aquifers. Saltwater ridges under the Red River and Little River valleys in central Louisiana divide the Catahoula aquifer. The hydraulic conductivity of the Catahoula varies between 20-260 feet/day.

The maximum depths of occurrence of freshwater in the Catahoula range from 250 feet above sea level to 2,200 feet below sea level. The range of thickness of the fresh water interval in the Catahoula is 50 to 450 feet.

The following table highlights some of the more common water characteristics that are considered when studying ground water quality with the minimum, maximum, and average values that were found during the current sampling of the Catahoula aquifer for pH, TDS, hardness, chloride, iron, and nitrite-nitrate:

PARAMETER	MINIMUM	MAXIMUM	AVERAGE
pH (SU)	7.08	8.66	7.75
TDS (ppm)	217	570	317
Hardness	<5	96.5	18.2
Chloride	3.7	37.5	16.5
Iron (ppb)	36.7	762	318.67
Nitrite-Nitrate	<0.05	<0.05	<0.05

The closest sampled well as part of the study is G-5196Z, which is approximately 15 miles southeast and 125 feet bgs. In summary, the data show that the ground water produced from this aquifer is soft and is of good quality when considering short or long-term health risk guidelines.

Red River Alluvial Aquifer

Well depths in the Red River Alluvial Aquifer within the study area range from 25 to 108 feet bgs. Information about this aquifer was obtained from *Red River Alluvial Aquifer Summary, Baseline Monitoring Project, FY2001, Appendix 3 of the Triennial Summary Report for the Environmental Evaluation Division of the Louisiana Department of Environmental Quality*.

Red River alluvium consists of fining upward sequences of gravel, sand, silt, and clay. The aquifer is poorly to moderately well sorted, with fine-grained to medium-grained sand near the top, grading to coarse sand and

gravel in the lower portions. It is confined by layers of silt and clay of varying thickness and extent.

The Red River Alluvial aquifer is hydraulically connected with the Red River and its major streams. Recharge is accomplished by direct infiltration of rainfall in the river valley, lateral and upward movement of water from adjacent and underlying aquifers, and overbank stream flooding. The amount of recharge from rainfall depends on the thickness and permeability of the silt and clay layers overlying it. Water levels fluctuate seasonally in response to precipitation trends and river stages. Water levels are generally within 30 to 40 feet of the land surface and movement is down-gradient and toward rivers and streams. Natural discharge occurs by seepage of water into the Red River and its streams, but some water moves into the aquifer when stream stages are above aquifer water levels. The hydraulic conductivity varies between 10-530 feet/day.

The maximum depths of occurrence of freshwater in the Red River Alluvial range from 20 feet above sea level, to 160 feet below sea level. The range of thickness of the fresh water interval in the Red River Alluvial is 50 to 200 feet.

The following table highlights some of the more common water characteristics that are considered when studying ground water quality with the minimum, maximum, and average values that were found during the current sampling of the Red River Alluvial aquifer for pH, TDS, hardness, chloride, iron, and nitrite-nitrate:

PARAMETER	MINIMUM	MAXIMUM	AVERAGE
pH (SU)	7.08	8.35	7.64
TDS (ppm)	396.0	1506.0	817.6
Hardness (ppm)	<5	653.0	353.7
Chloride (ppm)	6.1	664.0	163.4
Iron (ppb)	<20	10661.00	3396.20
Nitrite-Nitrate, as N (ppm)	<0.05	<0.05	<0.05

The closest sampled well as part of the study is Na-47, which is approximately 15 miles west and 80 feet bgs. In summary, the data show that the ground water produced from this aquifer is very hard, but is of good quality when considering short-term or long-term health risk guidelines. The data also show that this aquifer is of poor quality when considering taste, odor, or appearance guidelines.

Montgomery Aquifer

No regional information could be found about this aquifer.

Since the water wells are typically in production, no water level information is available for these aquifers to determine the direction of groundwater flow. Production wells will influence local flow direction within the capture zone of each well.

Recharge potential is low to none at the site. In addition, the downward slope from the site drains surface water and reduces recharge potential.

Site Groundwater

Twelve (12) soil borings up to 160 feet bgs, two (2) monitor wells and five (5) piezometers have been installed to delineate the subsurface soils and groundwater conditions.

Two distinct water bearing zones separated by fractured clay layers are present beneath the site. The water bearing zones are the upper aquifer and lower aquifer. The upper zone sand formation is not continuous across the site and appears to be a sand channel that trends northwest to southeast. The lower zone sand appears to be continuous across the site.

Monitor wells/piezometers P1-W1, P2-W1, P3-W1, MW1-W1 and MW2-W1 were collected on July 19-23, 1993. The samples were analyzed for volatile organics, semi-volatile organics and priority pollutant metals. No volatile organics were detected. Of the semi-volatile organics, Diethylphthalate was detected at 6 µg/l in P1-W1 and P2-W1 and Phenol was detected in all of the wells from 22 to 140µg/l. The groundwater screening standard (GWss) from the LDEQ RECAP document (October 2003) for Diethylphthalate is 2.92 mg/l (2,920 µg/l) so the detected concentrations are below the GWss. The GWss Phenol is 0.1825 mg/l (182.5 µg/l) so the detected concentrations are below the GWss. Naturally occurring metals were detected as follows:

Metals (mg/l)	Range	GWss
Aluminum	0.2 to 32.4	NA
Barium	0.012 to 0.32	2
Chromium	0.02 to 0.06	0.1
Copper	0.01 to 0.03	1.3
Zinc	0.07 to 0.29	1.095

A GWss for aluminum was not provided in RECAP. As shown, these metals are below the GWss for all constituents and represent background or indigenous concentrations.

6. *Subsidence problems*

Subsidence potential is minimal due to the low shrink/swell potential of

the sandy and clayey soils. The site is underlain by consolidated Pleistocene weathered soils that are resistant to further erosion or consolidation. There is no groundwater removal or other man-made factors that would cause subsidence.

7. *Climatic Conditions*

The average annual precipitation for Alexandria from 1971 to 2000 is 61.44 inches. Over this period, normal monthly precipitation ranged from 4.00 inches in September to 6.39 inches in December. Mean temperature ranged from 56.6 to 77.1 degrees Fahrenheit with an average temperature of 66.9 degrees Fahrenheit. The Wind Rose Plot from Alexandria International Airpark from 1980 to 1994 indicates that the average wind speed was 3.64 knots and the prevalent wind direction is from the south. The meteorological data for 2002 from the Baton Rouge station indicates that the prevailing wind direction is 90 degrees and the mean speed is 6 miles per hour. The maximum 2-minute wind was 60 miles per hour.

V. *Are there mitigating measures which would offer more protection to the environment than the facility as proposed without unduly curtailing non-environmental benefits?*

A. *Is this facility part of a master plan to provide waste management? Whose plan?*

Clean Harbors Colfax, LLC provides a safe and environmentally sound option for treating reactive hazardous waste. Prior to the issuance of the hazardous waste final permit to the facility, LDEQ recognized that an emergency would develop unless the reactive wastes could be managed by thermal treatment. Accordingly, LDEQ issued emergency permits authorizing the operation of the facility. The Clean Harbors Colfax, LLC, therefore, provides a significant contribution to the overall waste management plan for the State of Louisiana.

1. *How does it fit into the plan?*

There are no other management options available for the treatment of wastes received by Clean Harbors Colfax, LLC. There is no safe way to overcome the technological limitations associated with incinerating these wastes. Thermal treatment is the only technology available to safely deactivate the reactive wastes managed by Clean Harbors Colfax, LLC.

2. *What geographical area is served by the plan?*

Clean Harbors Colfax, LLC receives waste from local, regional, and out of state generators.

B. *Does the facility fit into an integrated waste management system?*

1. *On-site*

Clean Harbors Colfax, LLC is solely a reactive hazardous waste treatment facility.

2. *Regional*

Clean Harbors Disposal Services, LLC has other facilities in Louisiana and in other states, which treat and dispose other types of hazardous and solid waste. Clean Harbors Colfax, LLC is the only commercial facility capable of handling these types of reactive wastes.

C. *Can waste be disposed of in another fashion (way)?*

1. *Technology limitations:*

Traditional incineration technologies are not an option for deactivating the reactive wastes managed by Clean Harbors Colfax, LLC because of the potential for unplanned explosions under the confined conditions within an enclosed incinerator chamber. The only safe methodology for deactivating the reactive wastes managed by Clean Harbors Colfax, LLC is controlled open combustion in units such as the thermal treatment units used by the facility; therefore, there are no alternatives for deactivating reactive wastes which would offer more protection to the environment than the technology employed by Clean Harbors Colfax, LLC.

2. *Cost factors:*

Clean Harbors is not aware of any cost factors that would cause its position to change regarding the currently utilized technology. .

3. *Other reasons:*

None

D. *What quality assurance control will be utilized to protect the environment?*

1. *Plans for lab work:*

Incoming wastes are not sampled due to the reactive nature of the waste. Clean Harbors Colfax, LLC gathers sufficient information on incoming waste streams to allow proper storage and treatment without compromising worker safety. Chemical and physical analyses of each type of waste are generally provided by the generator. These analyses or analyses obtained from other reputable sources, such as the Department of Defense, will be referenced in the incoming waste records for each type of waste accepted at the facility.

2. *How are out-of-spec waste handled?*

Out-of-spec wastes are rejected in accordance with the procedure in D.3.

3. *What happens to rejected wastes?*

Rejected shipments of hazardous waste will be properly routed back to the original generator, and the required documentation will be made in the Facility Operating Record (i.e., on the respective manifest copies). In some cases, rejected wastes may be shipped to an alternate facility, if appropriate and if approved by the generator that shipped the waste to the facility.

4. *Treatment stabilization:*

None

5. *Segregation of non-compatible wastes:*

Incompatible wastes will be identified as part of the check-in procedure. Incompatible wastes are stored in separate storage units to eliminate accidental reaction that could cause an unplanned event. The truck staging/parking area has been sectioned with secondary containment structures to handle incompatible wastes in the event of a leak.

6. *Handling of containerized wastes:*

The design of the storage magazines ensures that standing liquids do not develop within the magazines and that wastes do not come into contact with ponded precipitation. The covered staging area at the entrance to Magazine numbers 8, 9, and 10 is constructed for unloading liquid reactive wastes. The preparation building is covered to prevent rainfall from entering the area. Waste is received only in approved DOT containers.

E. *Innovative techniques used to control release of waste or waste constituents into the environment.*

1. *Surface Impoundment*

None

2. *Land Application Treatment*

None

3. *Landfill (burial)*

None

4. *Incinerator*

The facility does not have an incinerator, but for the purposes of this section, the thermal treatment units (open burners) will be described. There is a large concrete unit with twenty (20) metal burn trays on concrete platforms. Each burn tray is equipped with a portable cover. The treatment area is located a sufficient distance from the storage areas based on ATF requirements to limit the potential for an incident at one location to spread to the other. Buffer zones of at least 660 feet separate the treatment units and site boundaries. The construction of the burner assemblies provides the necessary safeguards to minimize the entrance of rainwater and preclude surface run-on. Minimizing the entrance of rainwater, precluding run-on into the treatment process, and controlling run-off from the treatment area will insure that waste constituents are not transported to the ground water or subsurface environment. Furthermore, under the controlled burning methods used at the facility and based on the findings of a 1991 study of the thermal treatment system, there is minimal potential for migration of treated residues as thorough treatment of the waste materials will minimize the potential for impacting the air and groundwater. Additionally, air emissions are limited administratively by throughput capacity based on the air permit issued by LDEQ.

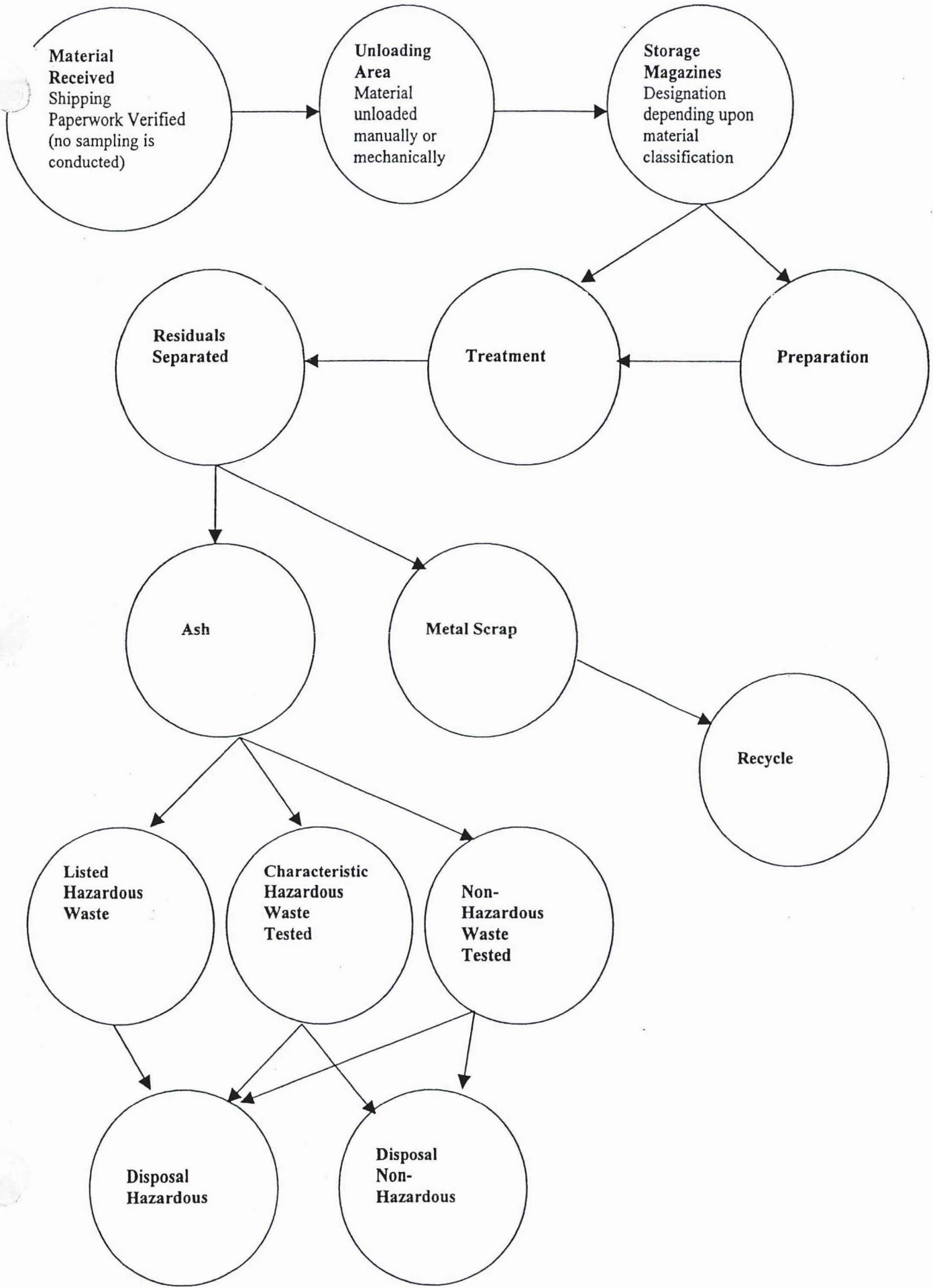
5. *Container storage:*

Wastes are stored in properly designated storage magazines that are well ventilated to minimize the build-up of extreme heat and pressures. These covered, totally enclosed magazines do not allow the entrance of precipitation and meet the requirements for storage structures as established by the ATF. The storage and treatment areas are located a sufficient distance apart based on ATF requirements to limit the potential for an incident at one location to spread to the other. Buffer zones of at least 660 feet separate storage units and site boundaries.

6. *Tanks*

None

Waste Flow Chart

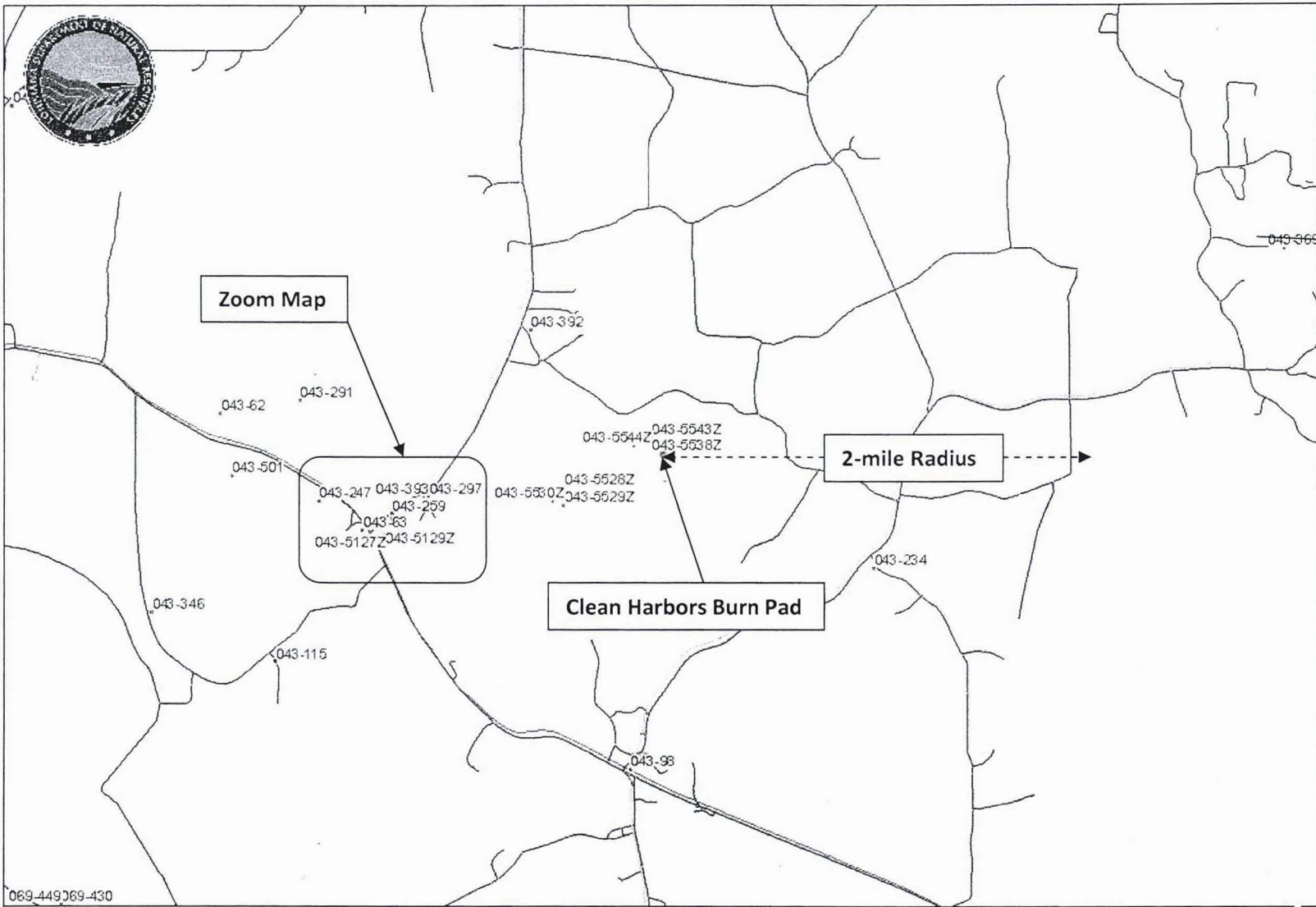


DOTD Well Locations

Latitude Longitude Radius Ft HSG
 31.57277778 -92.71138889 10560 Found 28 records

Well Distance Ft	SECTION	TOWNSHIP	RANGE	PARISH_N AHE	PARISH_N UM	LOCAL_W ELL_NUM	WELL_US E	DESSCRIPTIO N	WELL_STATUS	OWNERS NUM	OWNERS_NA ME	DRILLERS_NAME	WELL_DE PTH	CASING_D IAMETER	DATE_COMP LETED	WATER_L EVEL	DATE_MEAS URED	GEOLOGI C_UNIT	LATITUDE	LONGITUDE
398.92	24	07N	04W	GRANT		43 5538Z	W	Piezometer	Active	P-4	CLEAN HARBORS COLFAX, LLC	ECOSCIENCE RESOURCE GROUP, LLC	45	2	12/25/1993	18.8	8/22/2013	122CTHL	313425	924244
480.16	24	07N	04W	GRANT		43 5543Z	M	Monitor	Active	P-4	CLEAN HARBORS COLFAX, LLC	ECOSCIENCE RESOURCE GROUP, LLC	45	2	12/25/1993	18.8	8/22/2013	122CTHL	313426	924244
591.79	24	07N	04W	GRANT		43 5537Z	W	Piezometer	Active	P-3	CLEAN HARBORS COLFAX, LLC	ECOSCIENCE RESOURCE GROUP, LLC	51	2	7/15/1993	22.8	8/22/2013	122CTHL	313426	924246
591.79	24	07N	04W	GRANT		43 5542Z	M	Monitor	Active	P-3	CLEAN HARBORS COLFAX, LLC	ECOSCIENCE RESOURCE GROUP, LLC	51	2	7/15/1993	22.8	8/22/2013	122CTHL	313426	924246
720.72	24	07N	04W	GRANT		43 5544Z	M	Monitor	Active	P-5	CLEAN HARBORS COLFAX, LLC	ECOSCIENCE RESOURCE GROUP, LLC	50	2	12/29/1993	35.2	8/22/2013	122CTHL	313424	924249
755.28	24	07N	04W	GRANT		43 5539Z	W	Piezometer	Active	P-5	CLEAN HARBORS COLFAX, LLC	ECOSCIENCE RESOURCE GROUP, LLC	50	2	12/29/1993	35.2	8/22/2013	122CTHL	313425	924249
2470.83	19	07N	03W	GRANT		43 5528Z	M	Monitor	Plugged and Abandoned	GW-1	CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.	WALKER-HILL ENVIRONMENTAL SERVICES, INC.	70	2	9/20/2012	54	9/20/2012	122CTHL	313414	924308
2630.84	19	07N	03W	GRANT		43 5529Z	M	Monitor	Plugged and Abandoned	GW-2	CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.	WALKER-HILL ENVIRONMENTAL SERVICES, INC.	83	2	9/20/2012	61	9/20/2012	122CTHL	313410	924308
2822.32	19	07N	03W	GRANT		43 5530Z	M	Monitor	Plugged and Abandoned	GW-3	CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.	WALKER-HILL ENVIRONMENTAL SERVICES, INC.	80	2	9/20/2012	67	9/20/2012	122CTHL	313411	924311
4344.43	13	07N	04W	GRANT		43 392 P		Public Supply	Active	NO 2	WEST GRANT WTR	STAMM-SCHEELE	45	6	Oct-73	7	10/4/1973	112MGMR	313452	924317
5626.15	24	07N	04W	GRANT		43 297 T		Test Hole	Plugged and Abandoned		U S GEOL SURVEY	U.S.G.S.	93		Sep-71	0		11200NW M	313412	924345
5709.47	20	07N	03W	GRANT		43 234 H		Domestic	Active		INTERNAT PAPER	CROOKS B M	260	2	1960	0		122CTHL	313355	924143
5711.24	24	07N	04W	GRANT		43 393 P		Public Supply	Active	NO 3	WEST GRANT WTR	STAMM-SCHEELE	75	6	Oct-73	33	10/3/1973	122CTHL	313412	924346
6492.37	24	07N	04W	GRANT		43 260 H		Domestic	Active		WAMPLER, ALLEN	REX WTR	70	2	1958	0		122CTHL	313407	924354

Well Distance Ft	SECTION	TOWNSHIP	RANGE	PARISH_NAME	PARISH_NUM	LOCAL_WELL_NUM	WELL_USE	DESCRIPTION	WELL_STATUS	OWNER_NUM	OWNER_NAME	DRIILLERS_NAME	WELL_DEPTH	CASING_DIAMETER	DATE_COMPLETED	WATER_LEVEL	DATE_MEASURED	GEOLOGICAL_UNIT	LATITUDE	LONGITUDE
6553.95	24	07N	04W	GRANT	43	259	T	Test Hole	Plugged and Abandoned	TEST#1	LA PUBLIC WORKS	THOMAS, DOYLE	127		1969	0		122CTHL	313408	924355
6576.49	24	07N	04W	GRANT	43	365	T	Test Hole	Abandoned		WEST GRANT WTR	STAMM-SCHEELE	68	10	1973	33.34	8/13/1973	122CTHL	313407	924355
6576.49	24	07N	04W	GRANT	43	364	T	Test Hole	Abandoned		WEST GRANT WTR	STAMM-SCHEELE	95	10	1973	33.21	8/13/1973	122CTHL	313407	924355
6847.05	24	07N	04W	GRANT	43	5127Z	M	Monitor	Active	PGI-MW-1 R & D		GROUNDWATER/	134	4	Jun-93	75	6/16/1993	122CTHL	313403	924357
6847.05	24	07N	04W	GRANT	43	5129Z	M	Monitor	Active	PGI-MW-3 R & D		GROUNDWATER/	53	4	Jul-93	24	7/15/1993	122CTHL	313403	924357
6847.05	24	07N	04W	GRANT	43	5128Z	M	Monitor	Active	PGI-MW-2 R & D		GROUNDWATER/	40	4	Jul-93	25	7/14/1993	122CTHL	313403	924357
7082.43	24	07N	04W	GRANT	43	233	H	Domestic	Active		WAMPLER, ALLEN	REX WTR	90	2	1958	0		122CTHL	313407	924401
7320.83	24	07N	04W	GRANT	43	63	H	Domestic	Active		ETHRIDGE, E A	UNKNOWN	35	6	Jul-39	30	7/1/1939	122CTHL	313404	924403
7615.61	30	07N	03W	GRANT	43	98	H	Domestic	Active		DUKE, PAUL A	CROOKS B M	225	2	Feb-44	0		122CTHL	313307	924250
8204.72	24	07N	04W	GRANT	43	247	H	Domestic	Active		DUBOIS, L H	UNKNOWN	100	2	Nov-68	0		122CTHL	313411	924415
8661.36	23	07N	04W	GRANT	43	291	S	Rig Supply	Abandoned		DAVIS, LOUIS V	UNKNOWN	60	3	1965	5	5/29/1971	112RRVA	313435	924420
10217.07				GRANT	43	501	I	Irrigation	Active		RICHARD CRAIN	IRRIGATION EQUIPMENT, INC.	114	16	4/12/2011	12	4/16/2011	112CHCTL	313417	924439
10418.2	26	07N	04W	GRANT	43	115	T	Test Hole	Plugged and Abandoned		RICHARDSON, A	ACME PLUMB	609		Mar-58	0		11200NW M	313333	924427
10512.42	23	07N	04W	GRANT	43	62	I	Irrigation	Active		GOZA, PAUL	OWNER	25	6	1938	15	7/1/1939	112RRVA	313432	924442



069-449369-430

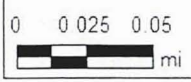
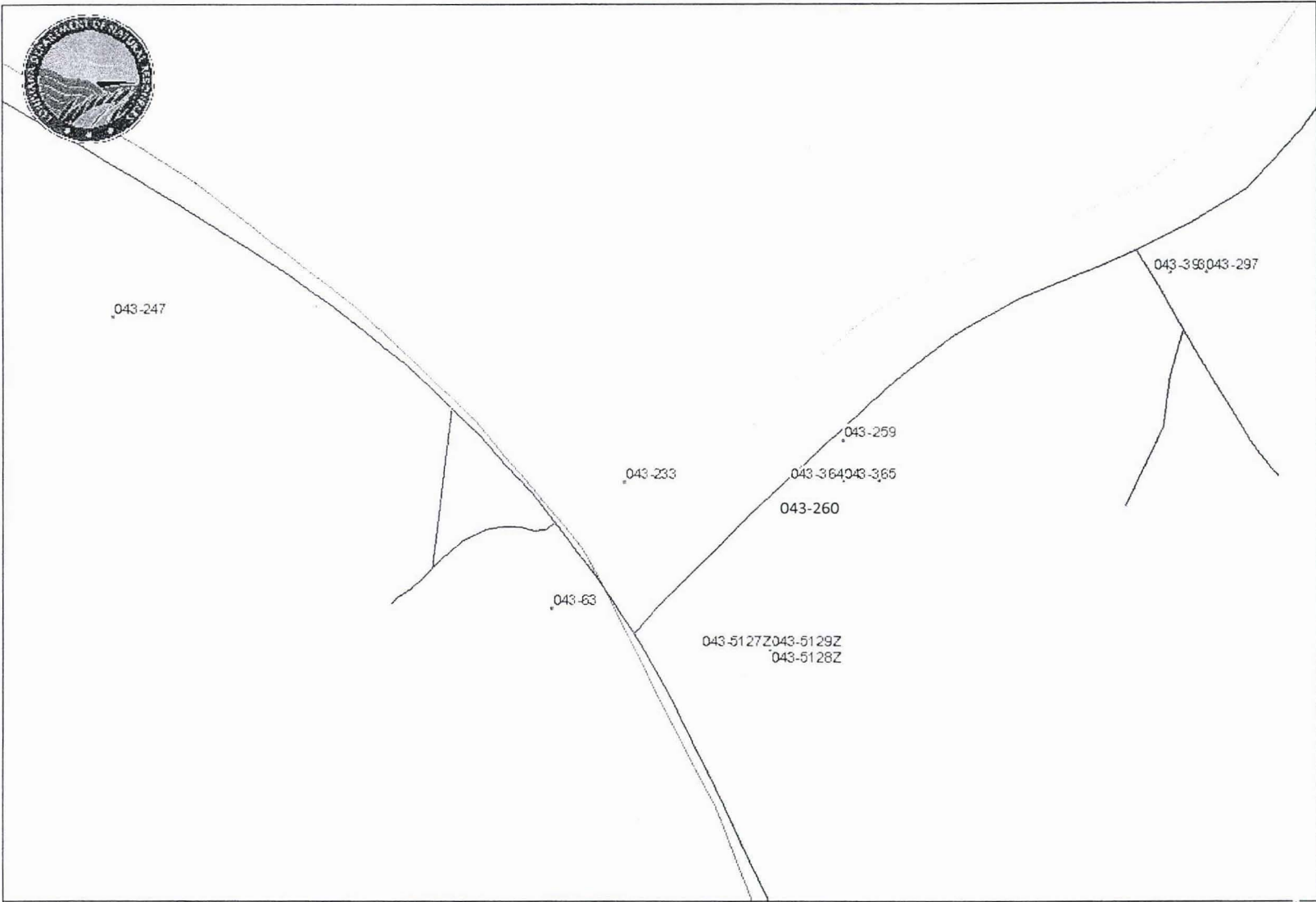
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 Absolute Scale: 1:36,765
 Relative Scale: 1 inch = 3,064 feet

Colfax 2-mile No Map 2

Disclaimer: This data is not to be used for legal purposes.

Date: 6/19/2016





Absolute Scale: 1:3,676
Relative Scale: 1 inch = 306 feet

Colfax 2-mile No Map 2 Zoom

Disclaimer: This data is not to be used for legal purposes.

Date: 6/19/2015



Chapter 5

Permit Application Contents

Subchapter C. Permit Applications: Parts I and II

515. Part I Information Requirements

- A. All applicants for TSD permits shall provide the following information to the administrative authority using the application form provided. Other formatting requirements may be specified by the administrative authority.*
- 1. date of application;*
 - 2. EPA identification number;*
 - 3. a brief description of the nature of the business;*
 - 4. the activities conducted by the applicant which require it to obtain a TSD permit;*
 - 5. name, mailing address, and location of the facility for which the application is submitted;*

 - 6. the latitude and longitude of the facility and a legal description of the site;*
 - 7. up to four SIC codes which best reflect the principal products or services provided by the facility;*
 - 8. an indication of whether the facility is new or existing and whether it is a first or revised application;*
 - 9. the operator's name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity;*
 - 10. owner's name, address, and phone number if different from operator's;*
 - 11. contact: name of individual to be contacted concerning hazardous waste management;*
 - 12. telephone number of contact;*
 - 13. whether the facility is located on Indian lands;*
 - 14. a listing of all permits or construction approvals received or applied for under any of the following programs:*
 - a. hazardous waste management program;*
 - b. Underground Injection Control (UIC) program;*
 - c. National Pollution Discharge Elimination System (NPDES) program;*
 - d. Prevention of Significant Deterioration (PSD) program under the Federal Clean Air Act;*
 - e. nonattainment program under the Clean Air Act;*

- f. *National Emission Standards for Hazardous Air Pollutants (NESHAP) preconstruction approval under the Clean Air Act;*
 - g. *ocean dumping permits under the Marine Protection Research and Sanctuaries Act;*
 - h. *dredge or fill permits under Section 404 of the federal Clean Water Act (CWA);*
or
 - i. *other relevant environmental permits;*
15. *a topographic map (or other map if a topographic map is unavailable) extending two miles beyond the property boundaries of the facility indicating the following; each hazardous waste treatment, storage, and disposal facility; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant;*
 16. *for existing facilities, a scale drawing of the facility showing the location of all past, present, and future treatment, storage, and disposal areas;*
 17. *for existing facilities, photographs of the facility clearly delineating all existing structures; existing treatment, storage, and disposal areas; and sites of future treatment, storage, and disposal areas;*
 18. *a description of the processes to be used for treating, storing, and disposing of hazardous waste, and the design capacity of these items;*
 19. *a specification of the hazardous wastes listed or designated to be treated, stored, or disposed of at the facility; an estimate of the quantity of such wastes to be treated, stored, or disposed of annually; and a general description of the processes to be used for such wastes;*
 20. *status: ownership status of existing site or land for proposed site (federal, state, private, public, other);*
 21. *operation status;*
 22. *list other company hazardous waste operations in Louisiana (permitted or non-permitted and current or abandoned);*
 23. *list other states in which hazardous waste operations are or have been conducted, as required by LAC 33:I.1701;*
 24. *zoning of site, if applicable;*
 25. *for hazardous debris: a description of the debris category(ies) and contaminant category(ies) to be treated, stored, or disposed of at the facility;*
 26. *other information required in LAC 33:I.1701; and*
 27. *comments.*

The facility has included all the above information, to the extent applicable. Please refer to the Part I application and associated attachments of the August 2003 Part B permit renewal application.

517. Part II Information Requirements (the Formal Permit Application)

The formal permit application information requirements presented in this Section reflect the standards promulgated in LAC 33:V.Subpart 1. These information requirements are necessary in order to determine compliance with all standards. Responses and exhibits shall be numbered sequentially according to the technical standards. The permit application must describe how the facility will comply with each of the sections of LAC 33:V.Chapters 15–37 and 41. Information required in the formal permit application shall be submitted to the administrative authority and signed in accordance with requirements in LAC 33:V.509. The description must include appropriate design information (calculations, drawings, specifications, data, etc.) and administrative details (plans, flow charts, decision trees, manpower projections, operating instructions, etc.) to permit the administrative authority to determine the adequacy of the hazardous waste permit application. Certain technical data, such as design drawings, specifications, and engineering studies, shall be certified by a Louisiana registered professional engineer. If a section does not apply, the permit application must state it does not apply and why it does not apply. This information is to be submitted using the same numbering system and in the same order used in these regulations:

The facility is presently operating under permit renewal LAD981055791-RN-OP-1 issued by the Louisiana Department of Environmental Quality (LDEQ) and the U.S. Environmental Protection Agency (EPA) with an effective date October 26, 2007. The application for this permit was signed in accordance with the requirements of LAC 33:V.509 (see Section "Certification") and was submitted to the administrative authority for review and subsequent approval. The facility's operations, plans, and procedures described in this application and the subject permit modification request comply with the applicable sections of the Louisiana Administrative Code. Written descriptions were accompanied by photographs, drawings, calculations, or other attachments, as appropriate, to provide the administrative authority with sufficient information to allow a proper review of the permit application. Technical supporting data were signed by a registered engineer where applicable.

Tables, figures, appendices, and attachments were contained in labeled tabbed sections behind the text of the permit application.

The format of the permit renewal application corresponded to the same numbering system and the same order as used in the Louisiana Administrative Code Title 33, Part V. The applicant noted those sections of LAC 33:V that do not apply and provided supporting justification.

A. a general description of the facility including hours of operation/day and days/week;

Clean Harbors Colfax, LLC is located on the east side of LA Highway 471, approximately four miles north of Colfax in Grant Parish, Louisiana. The facility stores and thermally treats waste exhibiting the characteristic of reactivity (D003), except for those wastes listed as reactive by reason of cyanide or sulfide content. In addition, the reactive wastes treated may also include other EPA waste codes as identified in the Part I (Part A).

The permitted facility includes a truck parking/staging area, storage magazines, and an operating area (consisting of a preparation building and the burning areas). Adjacent to the permitted areas are an administrative/receiving area and buffer zones between the operating area and adjacent property lines. The facility layout is shown on Appendix B of the August 2003 Part B permit renewal application (Drawing # 103).

The facility may choose to conduct facility operations at any time during a 24-hour day. The operating and administrative areas are equipped with floodlights to permit operations at night. Personnel are always on-site during facility operations and can be available, by appointment, to conduct facility operations at any time. The actual treatment of wastes by open burning, however, takes place only during daylight hours (30 minutes after sunrise to 30 minutes before sunset).

B. a topographic map or maps showing a distance of 1,000 feet around the facility at a scale of 2.5 centimeters (1 inch) equal to not more than 61.0 meters (200 feet); contours must be shown on the map. The contour interval must be sufficient to clearly show the pattern of surface water flow in the vicinity of and from each operational unit of the facility. The map or maps shall clearly show the following:

A topographic map of the facility is shown in Appendix B of the August 2003 Part B permit renewal application (Drawing #'s 103-105). The map shows the facility boundaries, the adjacent property for a distance of at least 1,000 feet beyond the hazardous waste treatment area boundaries and topographic contours at an interval of 10 feet. The map is drawn at a scale of 1-inch equals 200 feet.

1. map scale and date;

The date of the topographic map is identified in Appendix B of the August 2003 Part B permit renewal application (Drawing #'s 100 and 101). The map is drawn at a scale of 1-inch equals 200 feet.

2. *orientation of the map (north arrow);*

A north arrow is shown on the topographic map.

3. *100-year floodplain area;*

[Comment: Owners and operators of all facilities shall provide an identification of whether the facility is located within a 100-year floodplain and a flood hazard map (Corps of Engineers or Department of Housing and Urban development). This identification must indicate the source of data for such determination and include a copy of the relevant Federal Insurance Administration (FIA) flood map, if used. Where maps for the National Flood Insurance Program produced by FIA of the Federal Emergency Management Agency are available, they will normally be determinative of whether a facility is located within or outside of the 100-year floodplain. However, where the FIA map excludes an area (usually areas of the floodplain less than 200 feet in width), these areas must be considered and a determination made as to whether they are in the 100-year floodplain. Where FIA maps are not available for a proposed facility location, the owner or operator must use equivalent mapping techniques to determine if the facility is within the 100-year floodplain, and if so located, what the 100-year flood elevation would be.]

The 100-year floodplain limits for the geographic area in which the treatment unit and the surrounding facility property are located are indicated on the FEMA map that is included in Appendix O of the August 2003 Part B permit renewal application. As indicated on this map, the facility is not located within the 100-year floodplain area.

4. *surface waters including intermittent streams and surface flow through the site and a map of the potentiometric surface for aquifers within 100 feet of lowest elevation of disposal cells, or other facilities containing hazardous waste, from 1,000 feet upstream to 1,000 feet downstream, where practicable. Included should be a general area map and cross sections indicating the extent of freshwater sands, and the degree of isolation from waste sources by confining layers of clay;*

Surface runoff leaves the facility via natural drainage swales as indicated by the ground surface contours shown on the topographic map (see Appendix B of the August 2003 Part B permit renewal application). The nearest permanently flowing stream is located over 1,000 feet from the facility boundaries. The

operations of the facility do not significantly alter the natural drainage pattern and flow of surface water across the site.

There are no disposal cells at the site. Hazardous waste is handled on concrete pads which are constructed at or above grade. Appendix U of the August 2003 Part B permit renewal application contains an environmental assessment report for the site. Chapter 2 of this report deals with groundwater and the subsurface environment. Potentiometric maps of the two shallowest water bearing units, and cross sections based on site borings are presented in Appendix U of the August 2003 Part B permit renewal application. Additional recent potentiometric maps of the shallowest water bearing unit beneath the New Open Burn Pad and Retention Pond Area (NBA) are provided in the First Quarter 2015 Tier 1 Detection Monitoring Report dated May 21, 2015 (EDMS #9784182).

5. *surrounding land uses (residential, commercial, agricultural, recreational, public) such as schools, day care centers, hospitals, nursing homes, prisons, libraries, etc.;*

[Comment: A map or aerial photograph showing surrounding land use for the area within two miles of the site is required.]

An aerial photograph of the facility and adjacent land is presented in Appendix B of the August 2003 Part B permit renewal application (Drawing #'s 100 and 101). The property line can be seen on the aerial photograph from the clearing done adjacent to the fence. The properties adjacent to the facility are undeveloped and well-vegetated with trees and brush. The nearest residence is located more than 900 feet from the facility boundaries. The nearest schools, hospitals, libraries, recreational, or public lands are located at least three miles from the facility. The nearest major roadway is LA Highway 471, which is located along the north portion of the west site boundary.

6. *legal boundaries of the TSD facility site;*

A copy of the legal description of the facility boundaries is presented in Appendix B of the August 2003 Part B permit renewal application. These boundaries are marked on drawings in Appendix B of the August 2003 Part B permit renewal application.

7. *access control (fences, gates);*

Access to the facility from LA Highway 471 is controlled by a six-foot high fence topped with barbed wire with a six-foot high rail gate. The remaining site boundaries and adjacent land are fenced with six-foot high fencing.

The storage magazines, preparation building, covered ash storage area, covered truck staging/parking area, and burners are enclosed by a single common six-foot high chain-link fence topped with barbed wire with a six-foot high rail gate. The fence around the hazardous material handling area has a padlocked gate. The main entrance to the site from LA Highway 471 has an electronically locked gate.

Access to the operating area of the facility is controlled by a six-foot high fence topped with barbed wire. The fence is located as shown on the facility map in Appendix B of the August 2003 Part B permit renewal application.

The fence locations around the operation area are shown on Appendix B of the August 2003 Part B permit renewal application. All gates are locked when facility personnel are not present in those areas, when treatment operations are in progress, or when the facility is closed.

8. *injection and withdrawal wells both on site and off site;*

[Comment: A map of all known wells, operating or abandoned, on the site and within two miles of the site perimeter as required in LAC 33:V.515.A.15, including the depth of wells, amount of pumpage, water level depth (annual maximum and minimum), and water analysis from the water well nearest the disposal site is also required.]

The water wells within a two mile radius of the open burning facility are in Appendix B of the August 2003 Part B permit renewal application, Drawing # 104.

Appendix F of the August 2003 Part B permit renewal application contains a list of those wells (current as of July 2003) within two miles of the waste treatment area based on a data search of the Louisiana Department of Transportation and Development (LDOTD) registration files. Other information about the wells was obtained from the U.S. Geological Survey (USGS). Information on pumping rate and water levels is included in the table to the extent the USGS had information on these wells. Water quality analyses were available from the USGS for some wells. Table 3 indicates which wells have analytical data available. A copy of the analyses is in Appendix U of the August 2003 Part B permit renewal application. With the exception of fairly high iron content common to many shallow wells in Louisiana, and high chloride in well 98, there is nothing remarkable in the analyses.

9. *the proposed location of groundwater monitoring wells as required under LAC 33:V.3315.A and B;*

Section V.G of the Clean Harbors Colfax, LLC Facility (Facility) Resource Conservation Recovery Act (RCRA) Subpart X Renewal Permit LAD 981 055 791-RN-OP-1 (Permit) issued by the Louisiana Department of Environmental Quality (LDEQ) required implementation of a detection monitoring plan to determine if the

New Burn Area (NBA) Operations are having any adverse impacts on human health and the environment. A Tier I Sampling Plan (TISP) was submitted in accordance with the requirements of Section V.G of the Permit and was subsequently approved by the LDEQ as a Class 1-1 Permit Modification on December 1, 2011. The intent of the TISP was to present a tiered monitoring approach to determine whether a release of hazardous constituents of concern (HCOCs) to the environment has occurred (Tier I), and if so, delineate the extent of the release (Tier II). As required by the TISP, quarterly sampling of surface soils around the NBA, retention pond sediment and storm water, and outfall ditch sediment was conducted in 2012. Based on the results of the 2012 sampling events and statistical analysis, several constituents of concern (COCs) were detected in the near surface soils, retention pond sediment and storm water, and outfall drainage ditch sediment (Attachment A). The detections included volatile organic compounds (VOCs), semi-volatile organic compounds (SVOC), perchlorate, explosives, and metals that were above the naturally occurring background concentrations for the Facility or Louisiana RECAP Program Soil, Groundwater and Ecological Screening Standards. In accordance with the TISP and Section V.G.1.e of the Permit, a Tier II Sampling Plan (TIISP) for investigating the surface soils and outfall drainage ditch sediment was submitted to the LDEQ on April 15, 2013 and subsequently approved by the LDEQ on June 13, 2013. The TIISP has been completed and the Tier II Final Release Delineation Report was submitted to LDEQ in October 2013. Quarterly Tier I sampling has continued since 2012 to the present with the latest being 1Q-2015. The results of this and previous quarterly sampling events are summarized in the First Quarter 2015 Tier 1 Detection Monitoring Report dated May 21, 2015 (EDMS #9784182).

In addition, the TISP and Section V.G.1.b.vi of the Permit required that if hazardous constituents are detected in samples collected from the retention pond adjacent to the NBA, the Facility shall propose a groundwater monitoring program which meets the requirements of LAC33:V. Chapter 33 and 40 CFR §264 Subpart F. These regulations require a groundwater monitoring system as follows:

“The groundwater monitoring system shall consist of necessary wells, at least one hydraulically upgradient, to monitor groundwater moving toward the facility, and all the necessary number of wells downgradient to monitor groundwater leaving the facility. The wells shall be located to intercept contamination at the earliest possible occurrence. Well locations and completion depths must be selected to assure that all probable contaminant flow-paths are monitored. The wells shall be cased, and the casings shall be adequately sealed so that contaminants cannot be introduced from the surface or from one aquifer to another within the well bore, and so that only one water bearing sand is sampled per well. The entire groundwater monitoring system must be approved by the administrative authority.”

A phased Work Plan (WP) was proposed to address the groundwater monitoring requirements of Section V.G.1.b.vi of the Permit. A *Ground Water Monitoring System Work Plan* was submitted to LDEQ on June 11, 2013. This WP is currently under review by the LDEQ.

Prior to receiving approval of this WP, the LDEQ was advised of the Facility's plan to begin implementation of the Phase I WP during the 2Q-2013 Tier 1 Sampling Event at the Facility (June 2013). Phase I of the WP was to determine the suitability of the existing wells (MW-2, P-3, P-4, and P-5) for groundwater monitoring around the New Open Burn Pad and Retention Pond Area (NBA).

The results of Phase I of the WP was presented in the Groundwater Monitoring System Evaluation Report (GMSER) dated December 17, 2013 (EDMS #9139927). Based on the evaluation of well locations, well depths, screen intervals, surface conditions of the wells, groundwater flow direction and groundwater production and recharge, these wells should be suitable for use as monitor wells. Each will produce a representative sample from the permeable zone. The wells have been registered as monitor wells with the LDNR. Once the monitoring well system for the NBA is approved, the Facility will submit for review and approval a proposed groundwater monitoring program for the NBA. The GMSER is currently under review by the LDEQ.

10. the proposed "point of compliance" as defined under LAC 33:V.3311;

As described in the response to §517.B.9 above and Groundwater Monitoring System Evaluation Report (GMSER) dated December 17, 2013 (EDMS #9139927), the Facility has proposed using the existing wells (MW-2, P-3, P-4, and P-5) for groundwater monitoring around the New Open Burn Pad and Retention Pond Area (NBA). Once the monitoring well system for the NBA is approved, the Facility will submit for review and approval a proposed groundwater monitoring program including "point of compliance" for the NBA. The GMSER is currently under review by the LDEQ.

11. buildings, treatment, storage, or disposal operations; or other structures (recreation areas, runoff control systems, access and internal roads, storm sanitary, and process sewerage systems, loading and unloading areas, fire control facilities, utilities, security facilities, etc.);

All of the above items which are within the permitted area are shown on the drawings in Appendix B of the August 2003 Part B permit renewal application.

12. barriers for drainage or flood control;

The facility is located outside the 100-year floodplain; therefore, no barriers for flood control exist.

13. location of operational units within the TSD facility site, where hazardous waste is (or will be) treated, stored, or disposed of (including equipment cleanup areas). (For large TSD facilities, the administrative authority may allow the use of other scales on a case-by-case basis); and

These features are shown on the drawings in Appendix B of the August 2003 Part B permit renewal application. Each of the ten storage magazines where hazardous wastes are stored is constructed in accordance with ATF requirements (See Appendix R of the August 2003 Part B permit renewal application). They are located as shown on the drawings. No waste is actually disposed at the facility. The treatment area (burn pad) is also shown on the drawing. It consists of a concrete containment area that includes 20 concrete structures within it that hold the actual burn pans where hazardous waste is placed.

14. natural features affecting off-site drainage patterns, transportation, utilities, and location of effluent discharges;

Natural features which affect the off-site drainage pattern, transportation, or utilities are the topography and surface water bodies which are shown on the topographic map in Appendix B of the August 2003 Part B permit renewal application. Process effluent is not discharged from the facility. Non-contact stormwater discharge outfalls are shown in Appendix B of the August 2003 Part B permit renewal application.

C. site layout and facility design when phased construction is planned; the plans must indicate each phase and an accompanying schedule of construction;

No further construction is planned for the facility at this time. The layout as shown in Appendix B of the August 2003 Part B permit renewal application (Drawing # 103) is current and complete.

D. chemical and physical analyses of the hazardous wastes and the hazardous debris to be handled at the facility. At a minimum, these analyses shall contain all the information that must be known to treat, store, or dispose of the wastes properly;

The incoming wastes will not be analyzed to obtain the chemical or physical characteristics due to the reactive nature of the wastes that will be treated at this facility. Chemical analyses for the wastes treated at the facility are published by the generator, other reputable sources, the Department of Defense, the Louisiana Department of Public Safety, or the Louisiana Department of Environmental

Quality. Only waste that is treatable at the facility will be accepted. The facility stores and treats wastes that are classified as reactive and listed in Part I of the August 2003 Part B permit renewal application.

Analysis of the waste is discussed in the Waste Analysis Plan, Appendix G of the August 2003 Part B permit renewal application.

E. a copy of the waste analysis plan required by LAC 33:V.1519.B;

The Waste Analysis Plan (WAP) is included in Appendix G of the August 2003 Part B permit renewal application.

F. a description of the security procedures (including entry control, hours manned, lighting, monitoring, and other procedures to prevent unauthorized entry) and equipment required by LAC 33:V.1507 or a justification demonstrating the reasons for requesting a waiver of this requirement;

The security procedures, equipment, and signs are described in Section 1507 of this permit application. All gates are locked when the facility is closed, when facility personnel are not present in a given area, or when preparation or treatment activities are in progress.

Clear zones are provided around the storage magazines and the treatment areas for security and to provide access for emergency personnel and equipment, if necessary. Type ABC fire extinguishers, water hoses, and telephones will be located throughout the facility at the approximate locations indicated in Appendix I of the August 2003 Part B permit renewal application, Figure 2 (and as further detailed in the Inspection Plan located in Appendix H of the August 2003 Part B permit renewal application). The pond in the administrative area may serve as a temporary alternate source of water in an emergency situation, if needed.

Fencing around the site and steel posts at corners of the magazines will serve as moving-equipment barriers and personnel barriers to prevent accidental contact with the wastes. Warning signs are posted at close proximity, in accordance with the regulatory requirements feet along fences enclosing the facility, separating the facility administrative area from the operating area, and enclosing the storage units and the treatment areas. The signs read "Danger Unauthorized Personnel Keep Out." Warning signs restricting smoking, open flames, and other potential hazards are also posted.

G. a copy of the general inspection schedule required by LAC 33:V.1509.B. Include, where applicable, as part of the inspection schedule, specific requirements in LAC 33:V.1709, 1719, 1721, 1731, 1755-1759, 1763, 1907.I, 1911, 2109, 2309, 2507, 2703.A-G, 2907, 3119.B and C, and 3205;

The inspection schedule for the facility is provided as discussed in Section 1509 of this permit application. An inspection schedule is presented in Appendix H of the August 2003 Part B permit renewal application. The inspection schedule addresses all operating and emergency equipment used at the facility. Inspection and maintenance are planned in accordance with manufacturer's recommendations, the requirements of the Louisiana Administrative Code, and RCRA, where applicable.

H. a justification of any request for a waiver(s) of the preparedness and prevention requirements of LAC 33:V.1511;

No waiver of this requirement is being requested. The preparedness and prevention procedures are presented in Section 1511 of the August 2003 Part B permit renewal application, and they are further detailed in the Contingency Plan (Appendix I of the August 2003 Part B permit renewal application).

I. a copy of the contingency plan required by LAC 33:V.1513

[Note: Include, where applicable, as part of the contingency plan, specific requirements in LAC 33:V.2909];

The Contingency Plan is included in Appendix I of the August 2003 Part B permit renewal application.

J. a description of procedures, structures, or equipment used at the facility to:

Procedures, structures and equipment used during the operations of the facility and to respond to on-site unplanned events are discussed in Sections 1511, 1513, 1517, and 1521 of the August 2003 Part B permit renewal application. Additional details are presented in the Contingency Plan (Appendix I of the August 2003 Part B permit renewal application).

1. prevent hazards in unloading operations (for example, ramps, special forklifts);

The containers of waste are unloaded and loaded in the storage and treatment areas by hand or with the assistance of appropriate mechanical devices in accordance with ATF and DOT guidance. The selection of the appropriate unloading method considers the material, weight and packaging of the waste, and safety requirements.

2. *prevent runoff from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding (for example, berms, dikes, trenches);*

The wastes delivered to the facility are shipped in DOT approved containers. The wastes are stored in these containers until they are removed from the storage area for treatment. The shipping containers are placed in fully enclosed storage magazines to keep them dry and to eliminate contact with surface runoff. The containers of wastes are taken to the preparation building for modification, such as perforating or opening when appropriate, to facilitate combustion. The wastes are then soaked in diesel fuel, or placed in the open burners and then soaked with diesel fuel. The treatment areas are visually inspected for evidence of spills after each batch of waste is treated. Any observed spills are promptly collected and treated. The ground surface around the storage, burning, and preparation units is graded to direct surface runoff away from them. The design of the operating units and the operating procedures utilized at the facility ensure that runoff does not come into contact with uncontained waste. Furthermore, the two truck parking/staging areas and the burners are provided with roofs to prevent the entrance of direct rainfall.

The facility is located outside of a 100-year Floodplain limit. Flooding is not considered a concern for this facility.

3. *monitoring leachate control;*

The requirement to monitor for leachate control is not appropriate for this facility. There are no above ground or below ground disposal or permanent storage units for hazardous wastes. Surface impoundments or waste piles are not present at this facility. It is possible that waste spills may occur in the treatment area; however, such spills will be small and will be collected immediately, as described above in Section 517.J.2.

4. *prevent contamination of water supplies;*

Until actual treatment, the wastes remain in their original containers in fully enclosed storage units. During the treatment, the wastes are removed from storage, opened, and placed within the open burner. The potential for a spill to occur is minimal. Any spillage that does occur will be small in volume and will be collected and treated immediately in accordance with the procedures described in Section 1505 of the August 2003 Part B permit renewal application.

Furthermore, information provided by the U.S. Department of Agriculture Soil Conservation Service (see Section 1503) indicates that the surficial soils are primarily clayey with low permeability. No below grade or above grade disposal or permanent storage of hazardous wastes are conducted at this site.

5. monitor water and air pollution affecting area outside site;

As described in the response to §517.B.9 above and Groundwater Monitoring System Evaluation Report (GMSER) dated December 17, 2013 (EDMS #9139927), the Facility has proposed using the existing wells (MW-2, P-3, P-4, and P-5) for groundwater monitoring around the New Open Burn Pad and Retention Pond Area (NBA). Once the monitoring well system for the NBA is approved, the Facility will submit for review and approval a proposed groundwater monitoring program for the NBA. The GMSER is currently under review by the LDEQ. Stormwater discharges are monitored in accordance with the facility's NPDES permit.

Air monitoring was previously required on site, but after evaluation of the data from the early monitoring periods, the LDEQ, by letter of September 7, 1995, dispensed with its requirement for air monitoring (a copy of this letter is included with the Air Permit in Appendix C of the August 2003 Part B permit renewal application). As described in response to §517.B.9 above and in accordance with Section V.G. of the current permit, the near surface soils around the NBA has been monitored quarterly since 2012 to the present with the 1Q-2015 being the most recent sampling. The results of this and previous Tier 1 sampling events are summarized in the First Quarter 2015 Tier 1 Detection Monitoring Report dated May 21, 2015 (EDMS #9784182).

6. mitigate effects of equipment failure, power outages, inclement weather, or other abnormal conditions;

During the actual thermal treatment process, power is used only for remote ignition of the burn. Once started, no additional application of power is required to insure a safe and complete thermal treatment; therefore, a loss of power does not result in unsafe operations.

The immediate effects of a power outage would be a shutdown of operations at the facility. A power failure would result in a loss of power to the preparation building and to the floodlights within the operating area. For safety reasons, full operations would not resume at the facility until power was restored.

Facility operations are not conducted during stormy weather or other abnormal conditions that could potentially affect the safety of onsite personnel and increase the possibility of an accidental fire or explosion.

The inspection and maintenance schedules presented in Section 1509 are designed to monitor all critical emergency and operating equipment for malfunctions or deterioration. The inspection procedures require timely response to any observed equipment problems. The inspection program is designed to minimize potential interruptions of facility operations or security systems and procedures that could occur as a result of equipment failure.

7. *prevent undue exposure of personnel to hazardous waste (for example, protective clothing);*

Section 517.T.7 of the August 2003 Part B permit renewal application discusses protective measures that are implemented to protect the health and safety of facility personnel when handling wastes, particularly during emergency situations involving unplanned events. Facility employees are required to wear protective equipment/clothing such as Tyvek suits, steel-toed boots, hearing protection, and other protective equipment as needed (determined on a cases-by-case basis) when handling the wastes. Other measures to minimize the exposure of personnel to potential hazards associated with reactive wastes include annual training programs and refresher courses; constant visual monitoring while in the operations area; smoking, firearms, and open flame restrictions; and proper facility design for treatment and storage units.

8. *prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes as required to demonstrate compliance with LAC 33:V.1517; and*

The procedures implemented at the facility to minimize unplanned events involving the wastes stored and treated at the site are discussed in Section 1517. The facility stores and treats wastes classified as reactive, as described in Section 517.A. The facility is designed to provide separate storage for incompatible wastes or isolation from incompatible equipment or systems. A containment wall is provided at each truck staging/parking space to separate incompatible wastes in the event of a spill.

Firearms, and open flames are not allowed in the operating area except as necessary for thermal treatment. Smoking is allowed in designated areas only. All storage magazines are fully enclosed and are well-ventilated. The magazines are built to the standards established for such magazines by the Bureau of Alcohol, Tobacco, and Firearms. Specific ATF requirements are included in Appendix R of the August 2003 Part B permit renewal application.

9. *prevent nonpermitted releases to the atmosphere;*

The site procedures used to ensure that no unpermitted wastes are received at the facility also ensure that there are no unpermitted releases. Waste batches are carefully prepared to minimize the potential of a release. Only small amounts of material are burned at one time to help ensure that a violent reaction does not take place that could spread material beyond the contained treatment area. No thermal treatment occurs during nighttime hours, nor do any treatment activities occur during adverse weather, such as during rain events or windy conditions. All material processing takes place in permitted areas that utilize secondary containment and other precautions in accordance with the current RCRA Part B Permit (LAD 981055791-RN-OP-1 effective date October 26, 2007).

K. traffic pattern, estimated volume (number, types of vehicles) and control (for example, show turns across traffic lanes, and stacking lanes, if appropriate; describe access road surfacing and load bearing capacity; show traffic control signals);

The maximum volume of traffic entering the facility is estimated to be approximately 24 vehicles per day although the facility normally only receives one or two trucks per day. This number should not rise significantly even considering the proposed additional capacity. The maximum expected gross vehicle weight is about 80,000 pounds per truck.

Traffic access to the site is from LA Highway 471, as shown in Appendix B of the August 2003 Part B permit renewal application. The estimated vehicle count for LA Highway 471 is 800 per day, based on a 1995 traffic count furnished by the LDOTD. The vehicles entering and exiting the facility form approximately three percent of this truck traffic and are not expected to significantly affect the service life of the highway or to interfere with existing traffic patterns. Turning lanes, traffic control signals, or other traffic control measures are not necessary. The total maximum expected facility vehicle traffic is low in volume. Sufficient staging area is located within the operations area and along the facility access road, as shown in Appendix B of the August 2003 Part B permit renewal application, to eliminate vehicle stacking on LA Highway 471.

The interior access roads are all-weather with gravel surfacing. The roads have a design load bearing capacity of 80,000 pounds.

L. an outline of both the introductory and continuing training programs by owners or operators to prepare persons to operate or maintain the TSD facility in a safe manner as required to demonstrate compliance with LAC 33:V.1515. A list of general qualifications of key operating positions and a brief description of how

training will be designed to meet actual job tasks in accordance with these requirements;

The personnel training programs, refresher courses, training manual, training program participating by offsite emergency response agencies, and on site job descriptions, qualifications, and responsibilities are described in Sections 1513 and 1515 of the August 2003 Part B permit renewal application.

The training program is presented in Appendix K of the August 2003 Part B permit renewal application. The training plan describes the qualifications and responsibilities of key operations personnel. The training program also includes discussions of the state and federal regulations governing hazardous wastes; the permit conditions; waste stream descriptions and potential hazards; normal operating procedures; appropriate protective measures when handling wastes; and an annual review of the contingency plan. The review of the contingency plan includes emergency responsibilities for each employee; emergency communications, monitoring, and alarm systems; role and identification of offsite emergency response teams; onsite emergency equipment; emergency procedures; cleanup procedures; and reporting requirements.

All appropriate employees will be required to attend the introductory training course and the periodic refresher courses. The training program will include hands-on experience under the supervision of the facility operator to familiarize the employees with onsite equipment and systems.

M. a copy of the closure plan and, where applicable, the post-closure plan required by LAC 33:V.3511, 3523, and 1915. Include, where applicable, as part of the plans, specific requirements in LAC 33:V.1915, 2117, 2315, 2521, 2719, 2911, 3121, 3203 and 3207;

A copy of the Closure Plan is included as Appendix L of the August 2003 Part B permit renewal application. Since no waste will remain on-site beyond closure, a Post-Closure Plan is not required.

N. for hazardous waste disposal units that have been closed, documentation that notices required in LAC 33:V.3517 have been filed;

Closure notifications and documentation are discussed in Sections 3503 and 3517 of the August 2003 Part B permit renewal application. The facility understands that within 60 days of completion of final closure, a certification of final closure must be submitted as required by LAC 33:V.3517.A. Because this facility does not have

disposal units, the survey plat notification specified by LAC 33:V.3517.B is not required.

O. the most recent closure cost estimate for the facility prepared in accordance with LAC 33:V.3705 and a copy of the documentation required to demonstrate financial assurance under LAC 33:V.3707. For a new facility, a copy of the required documentation may be submitted 60 days prior to the initial receipt of hazardous wastes, if that is later than the submission of the Part II;

The estimated costs to complete closure are discussed in Section 3509 and Appendix L of the August 2003 Part B permit renewal application. The total cost to close the facility is included in Appendix L of the August 2003 Part B permit renewal application. As required by LAC 33:V.3705.B, the closure cost estimate will be revised annually, as necessary, to adjust for inflation. Updates to the closure plan and costs will also be submitted to the administrative authority whenever permit revisions are requested that alter the facility operations, design, and closure activities. The current closure plan and cost estimate will be maintained at the office adjacent to the facility and will be made available at all reasonable times to the administrative authority upon request.

The facility has established financial assurance with a certificate of insurance. All requirements of LAC 3707.D. will be met in this regard.

P. where applicable, the most recent post-closure cost estimate for the facility prepared in accordance with LAC 33:V.3709 plus a copy of the documentation required to demonstrate financial assurance under LAC 33:V.3711. For a new facility, a copy of the required documentation may be submitted 60 days prior to the initial receipt of hazardous wastes, if that is later than the submission of the Part II;

Post-closure maintenance and monitoring of this facility is not required. All waste will be removed from the treatment units at closure. Therefore, LAC 33:V.517.P does not apply to this site.

Q. where applicable, a copy of the insurance policy or other documentation which comprises compliance with the requirements of LAC 33:V.Chapter 37. For a new facility, documentation showing the amount of insurance meeting the specification of LAC 33:V.Chapter 37 that the owner or operator plans to have in effect before initial receipt of hazardous waste for treatment, storage, or disposal;

A copy of the insurance policy for the facility is presented in Appendix N of the August 2003 Part B permit renewal application. The liability coverage for sudden

accidental occurrences is provided on the insurance certificates. Copies of the certificates of liability insurance are included in Appendix N of the August 2003 Part B permit renewal application. The facility has already submitted originally signed duplicates of the certificates of insurance to the administrative authority.

R. *where appropriate, proof of coverage by a state financial mechanism in compliance with LAC 33:V.Chapter 37;*

The mechanisms to cover financial assurance requirements are included in Appendix N of the August 2003 Part B permit renewal application.

S. *a wind rose (i.e., prevailing wind speed and direction) and the source of the information;*

A Wind Rose for Alexandria is provided in Appendix O of the August 2003 Part B permit renewal application, along with other climatology information. This information was obtained from the England Air Force Base/Alexandria International Airpark.

T. *facility location information:*

1. *seismic standard. In order to determine the applicability of the seismic standard, LAC 33:V.1503.A.3, the owner or operator of the facility must identify the political jurisdiction (e.g., parish, township, or election district) in which the facility is proposed to be located;*

The facility is located in the Grant Parish, LA, Section 19 of T7N, R3W and Section 24 of T7N, R4W.

- a. *the owner or operator shall demonstrate compliance with the seismic standard. This demonstration may be made using either published geologic data (including federal hazardous waste regulations) or data obtained from field investigations carried out by the applicant. The information provided must be of such quality to be acceptable to geologists experienced in identifying and evaluating seismic activity. The information submitted must show that either:*
- i. *no faults which have had displacement in Holocene time are present, or no lineations which suggest the presence of a fault (which have displacement in Holocene time) within 3,000 feet of a facility are present, based on data from:*
- (a). *published geologic studies, including cites from federal regulations which demonstrate that the requirements of this Section do not apply;*

- (b). aerial reconnaissance of the area within a five-mile radius from the facility;*
- (c). an analysis of aerial photographs covering a 3,000-foot radius of the facility; and*
- (d). if needed to clarify the above data, a reconnaissance based on walking portions of the area within 3,000 feet of the facility; or*

The Federal Register was reviewed (40 CFR-Chapter 1-Part 264, Appendix VI). Appendix VI contains political jurisdictions in which compliance with 264.18(a), the seismic standard, must be demonstrated. Louisiana is not listed herein. Therefore, the federal regulations demonstrate that the requirements of the section do not apply as per LAC 33:V.517.T.1.a.i(a).

In addition, there are no known major faults defined in Grant Parish according to the publication entitled “Earthquakes in Louisiana” by Donald Stevenson and Richard McCulloh (Louisiana Geological Survey Public Information Series No. 7). Refer to Appendix D of the August 2003 Part B permit renewal application.

- ii. no faults may pass within 200 feet of the portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted based on data from a comprehensive geologic analysis of the site. Unless a site analysis is otherwise conclusive concerning the absence of faults within 200 feet of such portions of the facility, data shall be obtained from a subsurface exploration (trenching) of the area within a distance no less than 200 feet from portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted. Such trenching shall be performed in a direction that is perpendicular to known faults (which have had displacement in Holocene time) passing within 3,000 feet of the portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted. Such investigation shall document with supporting maps and other analyses, the location of any faults found, and shall be certified by an independent Louisiana registered professional engineer or geologist.*

The Federal Register was reviewed (40 CFR-Chapter 1-Part 264, Appendix VI). Appendix VI contains political jurisdictions in which compliance with 264.18(a), the seismic standard, must be demonstrated. Louisiana is not listed herein. Therefore, the federal regulations demonstrate that the requirements of the section do not apply as per LAC 33:V.517.T.1.a.i(a).

In addition, there are no known major faults defined in Grant Parish according to the publication entitled “Earthquakes in Louisiana” by Donald Stevenson and Richard McCulloh (Louisiana Geological Survey

Public Information Series No. 7). Refer to Appendix D of the August 2003 Part B permit renewal application.

In light of this information, the requirements of this paragraph do not apply to the facility.

2. *100-year floodplain;*

A copy of the FEMA map for the geographical area containing the facility is presented in Appendix O of the August 2003 Part B permit renewal application. The FEMA map reference is Panel 0115C, Flood Insurance Rate Map, Community No. 220076, dated November 16, 1995. It is clear that no part of the property is in the floodplain.

- a. *owners and operators of all facilities shall provide an identification of whether the facility is located within a 100-year floodplain;*
- b. *owners and operators of facilities located in the 100-year floodplain must provide the following information:*
 - i. *the 100-year flood level and any other special flooding factors (e.g., wave action) which must be considered in designing, constructing, operating, or maintaining the facility to withstand washout from a 100-year flood;*
 - ii. *engineering analysis to indicate the various hydrodynamic and hydrostatic forces expected to result at the site as a consequence of a 100-year flood;*
 - iii. *structural or other engineering studies showing the design of operational units (e.g., tanks, incinerators) and flood protection devices (e.g., floodwalls, dikes) at the facility and how these will prevent washout;*
 - iv. *if applicable, and in lieu of the above two provisions, a detailed description of procedures to be followed to remove hazardous waste to safety before the facility is flooded, including:*
 - v. *timing of such movement relative to flood levels, including estimated time to move the waste, showing that such movement can be completed before floodwaters reach the facility;*
 - vi. *a description of the location(s) to which the waste will be moved and demonstration that those facilities will be eligible to receive hazardous waste in accordance with LAC 33:V.Subpart 1;*
 - vii. *the planned procedures, equipment, and personnel to be used and the means to ensure that such resources will be available in time for use; and*
 - viii. *the potential for accidental discharges of the waste during movement;*

The requirements of LAC 33:V.517.T.2.b.i through viii do not apply to this facility since the facility lies outside the 100-year Floodplain limit.

- a. *existing facilities not in compliance with LAC 33:V.1503.B.3 shall provide a plan showing how the facility will be brought into compliance and a schedule for compliance;*

The facility is located outside the 100-year Floodplain limits and is not required to comply with LAC 33:V.517.T.2.c or LAC 33:V.1503.B.3.

3. *site geology, including:*

- a. *certification by a geologist or independent Louisiana registered professional engineer specializing in geotechnical engineering that the ground and subsurface conditions at the site are acceptable for the planned purposes of the facility;*

An environmental assessment report was prepared in January 1994 for the site. The report is included as Appendix U of the August 2003 Part B permit renewal application. Section II of the Environmental Assessment Report contains a geotechnical investigation describing site conditions and recommendations for site foundations. The report does not include cross-sections to 1,000 feet. According to the water well registration information mentioned previously, the deepest well within a 2-mile radius is 609 feet below grade. There was no well log available. Therefore, there is no geologic information available in this area for determination of the stratigraphy to a depth of 1,000 feet.

Research for deeper well logs resulted in one log deeper than 1,000 feet approximately 4.1 miles south in the town of Colfax. A boring (P-1) that was logged to 150 feet at the Colfax facility was used to correlate the upper strata. The log for P-1 is included in the Environmental Site Assessment report. There were no more available deep logs in the vicinity or north of the Colfax facility. The deep log (G-10) is in the Louisiana Geological Survey publication entitled, Ground-Water Resources of Grant and LaSalle Parishes (Geological Bulletin No, 20, 1941). Deep wells are not drilled due to the presence of salt water and gas at depths greater than approximately 300 feet. Drawing 114 depicts the cross-section location and Drawing 115 depicts the stratigraphy based on these logs. Surface elevations in feet, NGVD were not available from the logs. The relative surface elevations were estimated to be 150 feet, NGVD for P-1 and 110 feet, NGVD for G-10 from the electronic topographic software, TopoUSA.

As shown, clay strata extend from approximately -20 ft, NGVD to -450 ft, NGVD (430 feet thick) and from -530 ft, NGVD to -700 ft, NGVD (170 feet thick).

b. identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including groundwater flow direction and rate, and the basis for such identification (i.e., the information obtained from hydrogeologic investigations of the facility area);

The Environmental Assessment contained in Appendix U of the August 2003 Part B permit renewal application identifies and provides potentiometric data on two permeable units beneath the site. The uppermost unit was investigated by MW2 and P3, P4, and P5. These wells or piezometers screened in this unit have depths of 45 to 55 feet below the ground surface. Recent water levels have been collected quarterly in these wells (2Q-2013 to 1Q-2015) as part of the Groundwater System Evaluation Workplan and the Tier 1 Detection Monitoring required by Section V.G.1.b.vi of the current Permit (LAD 981055791-RN-OP-1 effective date October 26, 2007). The water level results have been reported in the Groundwater Monitoring System Evaluation Report (December 2013) and the Quarterly Tier 1 Detection Monitoring Reports with the most recent being the First Quarter 2015 Tier 1 Detection Monitoring Report (May 21, 2015 - EDMS #9784182). The potentiometric data for the 2Q-2013 to 1Q-2015 timeframe indicates flow is toward the northwest (P-3) with a gradient of 0.008 to 0.022 ft/ft and southeast (MW-2) from wells P-4 and P-5 with a gradient of 0.005 to 0.011 ft/ft.

The Environmental Assessment investigated the lower unit using means of MW1, P1, and P2. These wells and piezometers have total depths of 145 to 160 feet below the ground surface. The gradient in the lower unit was found to be toward the southeast with a magnitude of 0.0065 ft/ft.

c. soil types, textures, and conditions to depth of thirty feet below lowest elevation of planned disposal cells for impoundments, landfill and land treatment facility based on test holes at 200-foot intervals (or greater or less intervals if acceptable to the administrative authority);

This section does not apply because there are no disposal cells, landfill, or land treatment facility.

d. logs of test holes and wells, including soil samples for each pertinent strata analyzed for soil type, texture, permeability, and other pertinent characteristics;

Section II of the Environmental Assessment in Appendix U of the August 2003 Part B permit renewal application contains boring logs, monitor wells diagrams, and descriptions of site soils.

- e. general area map and cross sections indicating the extent of freshwater sands, and the degree of isolation of these aquifers to a depth of 1,000 feet from waste sources by confining layers of clay;*

As noted on Page 2 of Section II of the January 1994 Environmental Assessment Report in Appendix U of the August 2003 Part B permit renewal application, the LA Geological Survey indicated that the Colfax area has not been fully investigated. From the same page of the Environmental Assessment, it was noted that Corps of Engineer borings yielded little information about the site. Cross sections to 1,000 feet are therefore not available for Grant Parish.

- f. on a topographic map, a delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under LAC 33:V.3311, the proposed location of groundwater monitoring wells as required under LAC 33:V.3315.A and B; and*

Appendix B of the August 2003 Part B permit renewal application contains a topographic map which shows the waste management area. Appendix B of the August 2003 Part B permit renewal application contains another topographic map at a similar scale which shows the property boundary. As described in the response to §517.B.9 above and Groundwater Monitoring System Evaluation Report (GMSER) dated December 17, 2013 (EDMS #9139927), the Facility has proposed using the existing wells (MW-2, P-3, P-4, and P-5) for groundwater monitoring around the New Open Burn Pad and Retention Pond Area (NBA). Once the monitoring well system for the NBA is approved, the Facility will submit for review and approval a proposed groundwater monitoring program including "point of compliance" for the NBA. This submittal will include updates to the topographic map showing the delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under LAC 33:V.3311, the proposed location of groundwater monitoring wells as required under LAC 33:V.3315.A and B. The GMSER is currently under review by the LDEQ.

- g. detailed plans and an engineering report describing the proposed groundwater monitoring program to be implemented to meet the requirements of LAC 33:V.3315.A-H;*

As described in the response to §517.B.9 above and Groundwater Monitoring System Evaluation Report (GMSER) dated December 17, 2013 (EDMS #9139927), the Facility has proposed using the existing wells (MW-2, P-3, P-4, and P-5) for groundwater monitoring around the New Open Burn Pad and Retention Pond Area (NBA). Once the monitoring well system for the NBA is approved, the Facility will submit for review and approval a proposed groundwater monitoring program to be implemented for the NBA that meet the requirements of LAC 33:V.3315.A-H. The GMSER is currently under review by the LDEQ.

4. *site hydrology, including:*

- a. *travel times in feet/day for normal drainage of each natural surface drainage system within 1,000 feet of the property;*

Topographic maps of the site indicate three (3) surface drainage systems that collect and direct water away from the site. Drainage system No. 1 (DS-1) originates near the southwestern corner of the property and flows toward the southwest into Bayou Grappe. Using Manning's equation, travel time for normal drainage of this area is estimated to be 3.1 ft/sec or 267,840 ft/day. DS-2 originates near the southern boundary of the property and flows toward the southeast. Travel time for normal drainage of this area is estimated to be 0.894 ft/sec or 77,240 ft/day. DS-3 originates within the northern portion of the property and flows toward the northwest. Travel time for normal drainage of this area is estimated to be 1.34 ft/sec or 115,860 ft/day.

b. *climate factors:*

- i. *the 24-hour/25-year storm rainfall;*

Using data from the National Weather Service (Hershfield, D.M. 1961. "Technical Paper No. 40: Rainfall Frequency Atlas of the United States."), the estimated 24-hour/25-year storm rainfall is approximately 8.9 inches.

- ii. *maximum, minimum, and average temperature/month for past 10 years;*

The meteorological data, including temperature information, are provided in Appendix O of the August 2003 Part B permit renewal application.

- iii. *impact of previous hurricanes on area;*

Climatological data in Appendix O of the August 2003 Part B permit renewal application includes the paths of past hurricanes that have affected Louisiana. Occasionally, the path of a storm will cross Grant Parish, but typically, the storms have weakened and no longer produce hurricane-force winds by the time they are as far inland as Grant Parish. The primary impact of hurricanes on the area is rainfall.

iv. comparison of rainfall and evapotranspiration rates; and

Appendix O of the August 2003 Part B permit renewal application contains a monthly summary of pan evaporation rates and of average precipitation. The average pan evaporation at the Red River station for 1977-2000 was compared to the average monthly precipitation at Alexandria over 1961 through 2000. Precipitation exceeded pan evaporation in October through March. In other months, pan evaporation exceeds precipitation.

v. prevailing wind direction (provide wind rose);

Appendix O of the August 2003 Part B permit renewal application contains wind roses for Alexandria. There is no data for the site itself. This station is in close proximity to the site and should be representative of the condition at the facility.

- c. a description of any plume of contamination that has entered the groundwater from a regulated unit at the time that the application is submitted that:*
- i. delineates the extent of the plume on the topographic map such as required under LAC 33:V.521.B.4; and*
 - ii. identifies the concentration of each Table 4, LAC 33:V.Chapter 33, constituent throughout the plume or identifies the maximum concentrations of each such constituent in the plume;*

No plume of contamination is known to have entered the groundwater at the site; therefore, this section is not applicable.

- d. if the presence of hazardous constituents have not been detected in the groundwater at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a detection monitoring program which meets the requirements of LAC 33:V.3317. This submission must address the following items specified under LAC 33:V.3317:*

- i. a proposed list of indicator parameters, waste constituents, or reaction products that can provide a reliable indication of the presence of hazardous constituents in the groundwater;
- ii. a proposed groundwater monitoring system;
- iii. background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and
- iv. a description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data;

As described in the response to §517.B.9 above and Groundwater Monitoring System Evaluation Report (GMSER) dated December 17, 2013 (EDMS #9139927), the Facility has proposed using the existing wells (MW-2, P-3, P-4, and P-5) for groundwater monitoring around the New Open Burn Pad and Retention Pond Area (NBA). Once the monitoring well system for the NBA is approved, the Facility will submit for review and approval a proposed groundwater detection monitoring program to be implemented for the NBA that meet the requirements of LAC 33:V.3317. The GMSER is currently under review by the LDEQ.

- e. *if the presence of hazardous constituents has been detected in the groundwater at the point of compliance at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a compliance monitoring program which meets the requirements of LAC 33:V.3319. The owner or operator must also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of LAC 33:V.3321. To demonstrate compliance with LAC 33:V.3319, the owner or operator must address the following items:*
 - i. a description of the wastes previously handled at the facility;
 - ii. a characterization of the contaminated groundwater, including concentrations of hazardous constituents;
 - iii. a list of hazardous constituents for which compliance monitoring will be undertaken in accordance with LAC 33:V.3315 and 3317;
 - iv. proposed concentration limits for each hazardous constituent, based on the criteria set forth in LAC 33:V.3309.A, including a justification for establishing any alternate concentration limits;
 - v. detailed plans and an engineering report describing the proposed groundwater monitoring system, in accordance with the requirements of LAC 33:V.3315; and
 - vi. a description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data;

No contamination is known or suspected to have entered the groundwater at the site; therefore, this section is not applicable.

- f. if hazardous constituents have been measured in the groundwater which exceed the concentration limits established under LAC 33:V.3309, Table 1, or if groundwater monitoring conducted at the time of permit application under LAC 33:V.3301-3309 at the waste boundary indicates the presence of hazardous constituents from the facility in groundwater over background concentrations, the owner or operator must submit sufficient information, supporting data, and analyses to establish a corrective action program which meets the requirements of LAC 33:V.3321. To demonstrate compliance with LAC 33:V.3321, the owner or operator must address, at a minimum, the following items:*
 - i. a characterization of the contaminated groundwater, including concentrations of hazardous constituents;*
 - ii. the concentration limit for each hazardous constituent found in the groundwater as set forth in LAC 33:V.3309;*
 - iii. detailed plans and an engineering report describing the corrective action to be taken; and*
 - iv. a description of how the groundwater monitoring program will demonstrate the adequacy of the corrective action;*

Hazardous constituents, except for common laboratory artifacts, have not been detected in the groundwater at the site: therefore, this section is not applicable. The Environmental Assessment in Appendix U of the August 2003 Part B permit renewal application contains the results of the groundwater sampling at the facility. No periodic groundwater monitoring has been previously required for the facility. As described in the response to §517.B.9 above and Groundwater Monitoring System Evaluation Report (GMSER) dated December 17, 2013 (EDMS #9139927), the Facility has proposed using the existing wells (MW-2, P-3, P-4, and P-5) for groundwater monitoring around the New Open Burn Pad and Retention Pond Area (NBA). Once the monitoring well system for the NBA is approved, the Facility will submit for review and approval a proposed groundwater detection monitoring program to be implemented for the NBA that meet the requirements of LAC 33:V.3301 through 3309 and 3321. The GMSER is currently under review by the LDEQ.

5. environmental factors, including:

- a. list all known historical sites, recreational areas, archaeological sites, wildlife areas, swamps and marshes, habitats for endangered species, and other sensitive ecological areas within 1000 feet of the site; and*

There are no known historical or archaeological sites within the site or within 1,000 feet of the permitted area boundaries. There are no ecologically sensitive areas or possible endangered species within 1,000 feet of the permitted area or within the site boundaries. No known wildlife areas, swamps, or marshes are present at the facility or within 1,000 feet of the permitted facility boundaries.

A letter was sent to the State of Louisiana Division of Archaeology requesting information related to archaeological and historic sites, and a letter was sent to the U.S. Fish and Wildlife Service for information on endangered and threatened species in the area of the facility. Both agencies responded with no impact determinations, the correspondence is included in Appendix P of the August 2003 Part B permit renewal application. Another letter from the State of Louisiana regarding recreational use impact is pending and will be provided to LDEQ when it becomes available. There are no known recreational areas within 1,000 feet of the site.

b. indicate measures planned to protect such areas listed from detrimental impact from the operation of the proposed facility;

Protective measures for historical or archaeological sites or ecologically sensitive areas are not required because the continued operation of the facility does not impact such areas.

6. geographical factors. For an area within two miles of the proposed site, provide the following information:

a. map or aerial photograph showing all buildings identified as residential, commercial, industrial, or public (schools, day care centers, hospitals, nursing homes, prisons, libraries, etc.);

An aerial photograph of the facility and surrounding area within two miles of the facility boundaries is included in Appendix B of the August 2003 Part B permit renewal application. The property boundary and treatment facility boundary can be easily seen on the aerial photograph due to the clearing along the fence lines. A land use map that identifies use of the structures seen in the aerial photograph is presented in Appendix B of the August 2003 Part B permit renewal application.

b. population;

The estimated population within two miles of the facility is 150 people.

c. principal livelihood of residents for facilities located in rural areas;

The majority of the residents located within the two-mile limit are retired. The continuation of the storage and treatment operations at the facility does not impact the livelihood of these people.

d. land use; and

A land use map is presented in Appendix B of the August 2003 Part B permit renewal application (Drawing # 102). The land adjacent to the facility is undeveloped and well-vegetated with trees and brush. As indicated on the map, the primary land use within two miles of the facility is the growth and harvest of timber for commercial use. The closest farmland is located along the Red River, approximately two miles away from the facility.

e. road network, with average daily traffic count and route of trucks which will transport waste to the facility;

As shown in Appendix B of the August 2003 Part B permit renewal application, access to the facility is from LA Highway 471, which is adjacent to the north portion of the west boundary of the site. Vehicles delivering waste shipments to the site will enter from LA Highway 471. According to the LDOTD, LA Highway 471 had an average daily traffic count of 800 vehicles per day during 1995.

7. operations plan, including:

a. classification and estimated quantities of wastes to be handled;

The wastes treated at the facility are classified as reactive. No other wastes will be accepted, stored or treated onsite. Based on the requirements of the facility air permit the net explosive weight that can be treated annually is limited to 2,055,000 pounds, and no more than 55,950 pounds net explosive weight will be on site at one time, in magazines, undergoing preparation, awaiting unloading, or awaiting ignition. The specific waste codes acceptable at the facility are included in the Part I/A application.

b. methods and processes utilized:

The wastes received will be thermally treated to reduce the hazard of final disposal by eliminating the reactive properties of the wastes. The wastes are shipped from offsite sources. In accordance with requirements of the Waste Analysis Plan, the shipping documents and waste load are checked to determine acceptability of the waste shipments. Incompatible wastes are placed in separate, approved storage magazines until they can be treated onsite. The wastes may be taken from the storage units to the preparation building to modify the waste containers to facilitate thermal treatment. Removal of the liners or outer cores from the wastes is often necessary to achieve a thermally treatable material (since the outer core is often made of non-ignitable material). From the preparation building, the wastes are removed to the burning areas and placed in the open burners. The residue remaining after treatment is collected (using forklifts, shovels, or other appropriate mechanical means), containerized, and placed in temporary storage until it is shipped offsite for proper disposal.

i. facility capacity for each disposal method;

The facility stores and thermally treats wastes but does not dispose of wastes onsite. This capacity is based on the limitations of the air permit and those limits described in the Part I/A.

ii. detailed description of each process or method;

The wastes accepted at the facility are thermally treated by an open burning process. The wastes are shipped to the facility in DOT approved containers in accordance with the requirements of the DOT, the EPA, the ATF, and the LDEQ. Incompatible wastes are stored and treated separately.

Waste containers are constructed of materials such as cardboard, plastic, metal, glass, and wood. Cone-shaped charges have an outer case constructed of glass, steel, or aluminum. The inner cone, or liner, is made of copper. Preparation procedures include opening the charge cases to render them less explosive, perforating the cases to facilitate combustion, or shortening the cases to expedite handling and thermal treatment. Perforating and shortening is accomplished using a drill press and a band saw that are remotely operated to minimize exposure of facility personnel. The drill bit and saw blade are automatically cooled by water to prevent accidental combustion of the reactive wastes by sparks or heat. The wastes and containers are placed in the open burner and ignited. The burn lasts approximately 7 to 8 minutes. The maximum temperature obtained during the treatment process is approximately

2,400 degrees Fahrenheit in a non-controlled air feed environment such as open trough burning. The facility burn process reduces the reactive compounds to a non-reactive condition, and burns or cleans the containers. After the burn is completed, the burner is allowed to cool for approximately 40 minutes. Residue remaining from the thermal treatment is collected, placed in a container, and stored in an approved storage area until it can be shipped offsite for disposal.

After each batch of waste is burned, the burner and the ground surface adjacent to the burners and the preparation building are visually examined for evidence of spilled wastes. Spills are collected immediately and burned.

iii. storage and disposal procedures:

The facility treats reactive wastes and provides storage for such wastes until they can be treated. Prior to treatment, wastes are stored in DOT approved containers and secured in storage magazines meeting ATF standards (Refer to Appendix R of the August 2003 Part B permit renewal application). The facility does not have onsite disposal or long-term (greater than one year) storage units for hazardous wastes.

(a). plans for receipt, checking, processing, segregation of incompatible wastes, and odor control; and

The wastes stored and treated at the facility are delivered by trucks from offsite sources. The waste vehicles proceed from LA Highway 471 to the facility office/checkpoint located in the administrative area. Incoming waste shipments are accepted only if they are accompanied by a manifest. The facility will notify the administrative authority of unmanifested offsite shipments in accordance with LAC 33:V.909.

The facility will visually check the incoming waste load against the shipping manifest to determine acceptability and accuracy. The facility will attempt to resolve any identified inaccuracies on the waste manifests or associated paperwork with the transporter or waste generator. If significant discrepancies cannot be resolved, the facility will notify the administrative authority in accordance with the requirements of LAC 33:V.907.

Acceptability of the waste will be determined by comparing the waste manifest with waste analyses that are maintained in the facility's records. The facility accepts only wastes listed in the Part I/A. If a waste analysis is not found in the on-site waste references, the facility will contact the generator or knowledgeable agencies, such as the Department of Defense (DOD), the

LDEQ, and the Louisiana Department of Public Safety (LDPS) to attempt to locate a waste analysis. The copy of new waste analyses will be obtained to permit a determination of the acceptability of the waste. Copies of the analyses will be entered into the operating record as an acceptable reference and maintained on-site for future use.

The facility will acknowledge the acceptance of the waste by signing the manifest in accordance with LAC 33.V.905. A copy of the manifest will be given immediately to the transporter. Within the appropriate time-frame required by LAC 33, a copy of the manifest will be sent to the generator. A copy of the manifest is maintained at the facility for at least three years from the date of treatment of the waste. After the three-year period, a summary, extract, electronic scan, or microfilm copy of the information will be retained at the facility to keep a record of the received waste loads until the facility is closed.

Incompatible wastes will be identified as part of the check-in procedures. Incompatible wastes are stored in separate storage units to eliminate accidental reaction that could cause an unplanned event. The waste delivery vehicles will be directed to the appropriate storage units. The truck staging/parking area has been sectioned with secondary containment structures to handle incompatible wastes in the event of a leak (see Appendix B of the August 2003 Part B permit renewal application). Trucks will have containment areas separate from each other.

Waste containers are not opened until they are removed from storage to the treatment or preparation areas. The nature of thermal treatment does not result in odor; therefore, no odor control measures are necessary at the facility.

(b). life of each facility based on projected use;

The overall life of the facility is projected to be 35 years, although this projection could be reduced, or it could be extended indefinitely depending on future business conditions and permitting requirements, among other factors. The currently anticipated closure date, as noted in Section 3503.A.1 of the August 2003 Part B permit renewal application, is July 1, 2024.

The life expectancy of the storage units is at least 40 years. This estimate exceeds the expected life of the facility.

Properly maintained burn units are expected to have a service life corresponding to the intended service life of the facility. These units will be inspected and maintained or repaired, as needed, as required by LAC 33:V.1509.

Inspection and maintenance of on-site storage and treatment units and related equipment will be implemented in accordance with the procedures described in Section 1509 of the August Part B permit renewal application. These procedures are designed to extend the operating life of the units and to prevent hazards to human health and the environment by malfunctions or deteriorations.

(c). describe recordkeeping procedures, types of records to be kept, and use of the records by management to control the operation; and

Records kept at the facility include, but are not necessarily limited to, the following:

- copies of waste manifests with each type of waste referenced by the EPA classification number and published waste analysis;
- onsite waste activity records, including storage locations, dates, and other pertinent information;
- waste treatment details;
- copies of notices given to generators to assure them that the facility is permitted to accept reactive wastes;
- inspection, maintenance, and repair records;
- incident reports;
- copies of the permit application, closure plan, closure cost estimates, contingency plan, and any current plan or permit revision; and
- copies of all correspondence with the administrative authority.

Facility personnel will record in writing the details of the activities completed that require reporting. Required documentation may include the name of the employee, name of the facility, date of the activity, type of activity, results, projected schedules such as for non-immediate repairs, and identification of waste activity such as receipt, onsite transfer, and treatment.

All records are retained at the facility office and will be made available at all reasonable times to the administrative authority for their review at their request. Records will include written documents, receipts, plans, or photographs as appropriate.

Waste activity records will be kept current so that the location of all wastes stored onsite is known at all times to prevent mixing of incompatible wastes. The waste records will aid the operator in projecting storage availability, tracking elapsed time between storage and treatment of accepted wastes. The records are routinely reviewed for accuracy, relevancy, and other pertinent factors that may be used to determine future management practices at the facility.

As a part of the review process, the applicant may request changes in the facility design, operation, and closure procedures to respond to projected waste stream changes such as in quantity, type, or handling procedures; to improve the efficiency of the facility operations; or to address safety concerns. Such changes may require a request to modify the existing permit conditions in accordance with LAC 33:V.321. Such revision requests will be submitted to the administrative authority for review and approval. The changes will not be implemented until written approval has been received from the administrative authority.

The records for the current operating year are kept in the office either in filing cabinets or in other storage cabinets. Generally, records that are older than the current year will be placed into cardboard boxes and moved to a suitable on-site records storage location. At the current time, the facility utilizes a separate trailer for storage of many of the older documents.

(d). monitoring and recording of incoming wastes;

Each load of incoming waste will be inspected at the facility office/checkpoint. An unloading report will be prepared as the waste is unloaded. Items on this unloading report will be checked against the waste manifest. Significant discrepancies or unmanifested wastes will be handled as described in Section 517.T.7.b.iii.(a), above. The types of wastes listed on the manifest will be checked against profiles to verify their acceptability. The record for incoming wastes will include the source, form, quantity, EPA classification, and reference to the profile. Onsite storage, transfer, and treatment of the accepted wastes will be recorded, including locations, date, time, and type of movement or action taken with respect to the waste. The waste activity records will permit each incoming waste load to be tracked from the time it is received until it is treated.

The waste activity records will become part of the operating record of the facility. These records will be maintained at the facility office and will be available for inspection at all reasonable times by the administrative authority at their request.

U. special requirements. Administrative authority may require additional provisions for special procedures or processes, for specific information for a supplementary environmental analysis, or for such information as may be necessary to enable the administrative authority to carry out his duties under other state laws;

The plans and procedures for the design, operation, and closure of the facility comply with the applicable portions of the Louisiana Administrative Code. However, the facility understands that the administrative authority may require additional information, clarification, or provisions to address special procedures or other items to permit them to complete their responsibilities as required under state law. The facility will cooperate with the administrative authority by complying with such requests or by providing justification as to why such compliance is inappropriate for the facility.

V. for land disposal facilities, if an approval has been granted under LAC 33:V.2239, a petition has been approved under LAC 33:V.2241 or 2271, or a determination made under LAC 33:V.2273, a copy of the notice of approval or a determination is required; and

This facility is not a land disposal facility; therefore, this regulation is not applicable.

W. a summary of the preapplication meeting, along with a list of attendees and their addresses, and copies of any written comments or materials submitted at the meeting, as required under LAC 33:V.708.A.3.

Since the facility did not propose any major changes in the August 2003 Part B permit renewal application, the requirement for a pre-application meeting was not applicable. Furthermore, since the August 2003 application amounted to a revision of a 1997 application, this requirement was not in existence at that time; therefore, a preapplication meeting was not required. Pertaining to this Class 3 Permit Modification request, a Public Meeting was held at the Grant Parish Library on February 9, 2015. Aside from personnel from the facility, no members of the general public appeared at the meeting. Documentation concerning this meeting was also provided to the LDEQ on 02/11/15.

Subchapter E. Specific Information Requirements

519. Contents of Part II: General Requirements

A. Part II of the permit application consists of the general information requirements of this Section, and the specific information requirements in LAC 33:V.519-549 applicable to the facility. The Part II information requirements presented in LAC 33:V.519-549 reflect the standards promulgated in LAC 33:V.Chapters 15-37. These

information requirements are necessary in order for the administrative authority to determine compliance with LAC 33:V.Chapters 15-37. If owners and operators of Hazardous Waste Management facilities can demonstrate that the information prescribed in Part II cannot be provided to the extent required, the administrative authority may make allowance for submission of such information on a case-by-case basis. Information required in Part II shall be submitted to the administrative authority and signed in accordance with requirements in Subchapter B of this Chapter. Certain technical data, such as design drawings and specifications and engineering studies, shall be certified by a Louisiana registered professional engineer. For post-closure permits, only the information specified in LAC 33:V.528 is required in Part II of the permit application.

Clean Harbors Colfax, LLC acknowledges the requirement to provide specific information to the extent that it is applicable to this facility.

520. Specific Part II Information Requirements for Groundwater Protection

The following additional information regarding protection of groundwater is required from owners or operators of hazardous waste facilities containing a regulated unit except as provided in LAC 33:V.3301.B and C:

A. a summary of the groundwater monitoring data obtained during the interim status period under LAC 33:V.4367, 4369, 4371, 4373, and 4375, where applicable;

The facility was not operating under interim status; therefore, this requirement is not applicable.

B. identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including groundwater flow direction and rate, and the basis for such identification (i.e., the information obtained from hydrogeologic investigations of the facility area);

The Environmental Assessment contained in Appendix U of the August 2003 Part B permit renewal application identifies and provides potentiometric data on two permeable units beneath the site. The uppermost unit was investigated by MW2 and P3, P4, and P5. Wells or piezometers screened in this unit have depths of 45 to 55 feet below the ground surface. Recent water levels have been collected quarterly in these wells (2Q-2013 to 1Q-2015) as part of the Groundwater System Evaluation Workplan and the Tier 1 Detection Monitoring required by Section V.G.1.b.vi of the current Permit (LAD 981055791-RN-OP-1 effective date October 26, 2007). The water level results have been reported in the Groundwater Monitoring System Evaluation Report (December 2013) and the Quarterly Tier 1 Detection Monitoring Reports with the most recent being the First Quarter 2015 Tier 1 Detection Monitoring Report (May 21, 2015 - EDMS #9784182). The potentiometric data for the 2Q-2013 to 1Q-2015 timeframe indicates flow is toward the northwest (P-3) with

a gradient of 0.008 to 0.022 ft/ft and southeast (MW-2) from wells P-4 and P-5 with a gradient of 0.005 to 0.011 ft/ft.

The Environmental Assessment investigated the lower unit using means of MW1, P1, and P2. These wells and piezometers have total depths of 145 to 160 feet below the ground surface. The gradient in the lower unit in July was found to be toward the southeast with a magnitude of 0.0065 ft/ft.

C. on the topographic map required under LAC 33:V.517.B, a delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under LAC 33:V.3311, the proposed location of groundwater monitoring wells as required under LAC 33:V.3315, and, to the extent possible, the information required in LAC 33:V.520.B;

Appendix B of the August 2003 Part B permit renewal application includes a topographic map which shows the waste management area. An additional drawing in Appendix B of the August 2003 Part B permit renewal application is a topographic map at a similar scale which shows the property boundary. As described in the response to §517.B.9 above and Groundwater Monitoring System Evaluation Report (GMSER) dated December 17, 2013 (EDMS #9139927), the Facility has proposed using the existing wells (MW-2, P-3, P-4, and P-5) for groundwater monitoring around the New Open Burn Pad and Retention Pond Area (NBA). Once the monitoring well system for the NBA is approved, the Facility will submit for review and approval a proposed groundwater detection monitoring program and proposed "point of compliance" to be implemented for the NBA that meet the requirements of LAC 33:V.3311, 3315, and 3317. The topographic map required under LAC 33:V.517.B will then be updated to include the proposed "point of compliance" and the location of the groundwater monitoring wells and to the extent possible, the information required in LAC 33:V.520B. The GMSER is currently under review by the LDEQ.

D. a description of any known plume of contamination that has entered the groundwater from a regulated unit at the time that the application was submitted that:

- 1. delineates the extent of the plume on the topographic map required under LAC 33:V.517.B; and*
- 2. identifies the concentration of each constituent listed in LAC 33:V.3325 throughout the plume or identifies the maximum concentrations of each LAC 33:V.3325 constituent in the plume;*

Piezometers were installed and sampled in the new burn area. The wells were sampled once in 1993. The results of this sampling are reported in Tables 2-1 and 2-2 in Section II of the Environmental Site Assessment (Appendix U of the August

2003 Part B permit renewal application). No plume of contamination is known to have entered the groundwater at the site; therefore, this section is not applicable.

E. detailed plans and an engineering report describing the proposed groundwater monitoring program to be implemented to meet the requirements of LAC 33:V.3315;

As described in the response to §517.B.9 above and Groundwater Monitoring System Evaluation Report (GMSER) dated December 17, 2013 (EDMS #9139927), the Facility has proposed using the existing wells (MW-2, P-3, P-4, and P-5) for groundwater monitoring around the New Open Burn Pad and Retention Pond Area (NBA). Once the monitoring well system for the NBA is approved, the Facility will submit for review and approval a proposed groundwater detection monitoring program to be implemented for the NBA that meet the requirements of LAC 33:V.3315. The GMSER is currently under review by the LDEQ.

F. if the presence of hazardous constituents has not been detected in the groundwater at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a detection monitoring program that meets the requirements of LAC 33:V.3317. This submission must address the following items specified under LAC 33:V.3317:

- 1. a proposed list of indicator parameters, waste constituents, or reaction products that can provide a reliable indication of the presence of hazardous constituents in the groundwater;*
- 2. a proposed groundwater monitoring system;*
- 3. background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and*
- 4. a description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data;*

As described in the response to §517.B.9 above and Groundwater Monitoring System Evaluation Report (GMSER) dated December 17, 2013 (EDMS #9139927), the Facility has proposed using the existing wells (MW-2, P-3, P-4, and P-5) for groundwater monitoring around the New Open Burn Pad and Retention Pond Area (NBA). Once the monitoring well system for the NBA is approved, the Facility will submit for review and approval a proposed groundwater detection monitoring program to be implemented for the NBA that meet the requirements of LAC 33:V.3317. The GMSER is currently under review by the LDEQ.

- G. *if the presence of hazardous constituents has been detected in the groundwater at the point of compliance at the time of the permit application, the owner or operator must submit to the Office of Environmental Services, Permits Division, sufficient information, supporting data, and analyses to establish a compliance monitoring program that meets the requirements of LAC 33:V.3319. Except as provided in LAC 33:V.3317.H, the owner or operator must also submit to the Office of Environmental Services, Permits Division, an engineering feasibility plan for a corrective action program necessary to meet the requirements of LAC 33:V.3321, unless the owner or operator obtains written authorization in advance from the administrative authority to submit a proposed permit schedule for submittal of such a plan. To demonstrate compliance with LAC 33:V.3319, the owner or operator must address the following items:*
1. *a description of the hazardous waste code specified in LAC 33:V.Chapter 49 for the wastes previously handled at the facility;*
 2. *a characterization of the contaminated groundwater, including concentrations of hazardous constituents;*
 3. *a list of hazardous constituents for which compliance monitoring will be undertaken in accordance with LAC 33:V.3315 and 3319;*
 4. *proposed concentration limits for each hazardous constituent, based on the criteria set forth in LAC 33:V.3309.A, including a justification for establishing any alternate concentration limits;*
 5. *detailed plans and an engineering report describing the proposed groundwater monitoring system, in accordance with the requirements of LAC 33:V.3315; and*
 6. *a description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data;*

Hazardous constituents, except for common laboratory artifacts, have not been detected in the groundwater at the site: therefore, this section is not applicable.

- H. *if hazardous constituents have been measured in the groundwater that exceed the concentration limits established under LAC 33:V.3309.Table 1, or if groundwater monitoring conducted at the time of permit application under LAC 33:V.4367, 4369, 4371, 4373, and 4375 at the waste boundary indicates the presence of hazardous constituents from the facility in groundwater over background concentrations, the owner or operator must submit sufficient information, supporting data, and analyses to establish a corrective action program that meets the requirements of LAC 33:V.3321. However, an owner or operator is not required to submit information to establish a corrective action program if he or she demonstrates to the administrative authority that alternate concentration limits will protect human health and the environment after considering the criteria listed in LAC 33:V.3309.B.*

An owner or operator who is not required to establish a corrective action program for this reason must instead submit sufficient information to establish a compliance monitoring program that meets the requirements of LAC 33:V.3319 and LAC 33:V.520.F. To demonstrate compliance with LAC 33:V.3321, the owner or operator must address, at a minimum, the items listed in LAC 33:V.520.H.1-4 below (the permit may contain a schedule for submittal of the information required in LAC 33:V.520.H.3 and 4 provided the owner or operator obtains written authorization from the administrative authority prior to submittal of the complete permit application):

- 1. a characterization of the contaminated groundwater, including concentrations of hazardous constituents;*
- 2. the concentration limit for each hazardous constituent found in the groundwater as set forth in LAC 33:V.3309;*
- 3. detailed plans and an engineering report describing the corrective action to be taken; and*
- 4. a description of how the groundwater monitoring program will demonstrate the adequacy of the corrective action.*
- 5. the permit may contain a schedule for submittal of the information required in LAC 33:V.520.H.3 and 4 provided the owner or operator obtains written authorization from the administrative authority prior to submittal of the complete permit application.*

Hazardous constituents, except for common laboratory artifacts, have not been detected in the groundwater at the site: therefore, this section is not applicable.

521. Specific Part II Information Requirements for Containers

Except as otherwise provided in LAC 33:V.2101 owners or operators of facilities that store containers of hazardous waste must provide the following additional information:

- A. a description of the containment system to demonstrate compliance with LAC 33:V.2111 show at least the following:*
 - 1. basic design parameters, dimensions, and materials of construction;*

The basic design details of the storage magazines are shown in Appendix B of the August 2003 Part B permit renewal application. The storage magazines are approximately 10 feet by 20 feet in area and 8 feet high. The floors, walls, roof, and doors are constructed of high tensile steel and covered with hardwood. The high tensile steel is coated with a non-reactive paint to protect the steel from corrosion or erosion. The magazines are ventilated to prevent the build-up of extreme heat and pressure or accumulation of moisture. The vent openings are screened. The magazines are grounded against lightning strikes. Magazines Nos. 8, 9 and 10 have

12-inch high thresholds and vertical extensions for floor vents to contain possible spills. The height of the thresholds and floor vent extensions are based on a design spill of 10% of the maximum stored waste volume.

The doors are double locked with 5 tumbler locks. The four corners of the magazines and the fences are posted with warning signs. Smoking, open flames, firearms, and other spark producing devices are prohibited within 50 feet of the magazines.

The covered staging area at the entrance of Magazine Nos. 8, 9, and 10 measures 107 feet long by 27 feet wide in plan. The maximum unloading capacity in this area has been determined to be 80 - 55 gallon drums of liquid wastes. The 16-inch high concrete walls are designed to contain 10% of this volume, plus moderate amounts of wind blown rainwater with 3-inches of freeboard remaining. Containment calculations for this area are included in Appendix S of the August 2003 Part B permit renewal application.

The covered storage area located at the rear of the preparation building measures 60 feet long by 18 feet wide. There is a 1500 gallon polyethylene tank also located in this area. This tank may be used for site generated waste produced as a result of treatment of incoming hazardous waste. It may also be used to hold liquids drained from incoming materials. In either case, the facility will manage the material in accordance with the generator standards outline in LAC 33.V. Secondary containment for the ash container storage area and polyethylene tank has been provided, and consists of 6-inch high concrete curbing with a collection point near the center of the containment area. The 6-inch curbing will contain approximately 3,400 gallons of liquid. Since this area is enclosed, it is highly unlikely that more than an incidental amount of rainwater will ever be present. Containment calculations for these areas are included in Appendix S of the August 2003 Part B permit renewal application.

The preparation building measures approximately 40 feet long by 40 feet wide. The containment for the preparation area consists of concrete curbing (approximately 2-inches high) around the interior of the building, with a 2-inch radius curbing located at the entrance of the building for vehicle entrance. The design will contain approximately 1,795 gallons of liquid. The slab is gently sloped to the center of the preparatory building.

The covered truck staging/parking area measures 107 feet long by 64 feet wide. Four truck parking spaces are provided with individual containment for the separation of incompatible wastes in the event of a leak. The containment wall is constructed of concrete with a total height of 16-inches. Each of the four parking areas contains a sump for rainwater collection. The 16-inch concrete walls are designed to contain 10% of a maximum truckload of drums and moderate amounts of wind blown rainwater, with approximately 3-inches of

freeboard. Containment calculations for this area are included in Appendix S of the August 2003 Part B permit renewal application.

The containment system that encompasses the concrete burner pad consists of a 18-inch high concrete wall. Located within the containment area is a concrete slab. The concrete access ramp provides entry to the slab for placement of wastes to be treated. The 18-inch high concrete walls are designed to contain moderate amounts of wind blown rainwater and to contain the contents of the burner trough or burner pot with approximately 3-inches of freeboard. The ground slab is gently sloped to the sumps located in the rear of the structure. Containment calculations for the open concrete burners are included in Appendix S of the August 2003 Part B permit renewal application.

- 2. how the design promotes drainage or how containers are kept from contact with standing liquids in the containment system;*

The design of the storage magazines ensures that standing liquids do not develop within the magazines and that the wastes do not come into contact with ponded water or precipitation. In the magazines where liquid wastes may be stored, the materials are elevated on portable containment units in order to prevent potential contact with standing liquids in the highly unlikely event of a spill from one or more stored containers.

The storage magazines are fully enclosed units. The inside walls are equipped with vents to prevent the accumulation of moisture within the magazines. The ground surface around the magazines is graded to direct surface runoff away from the storage units. The floors of the magazines are elevated approximately six inches above grade. Within the magazines, the containers of wastes are stacked on the floor of the storage unit.

The covered staging area at the entrance of Magazine Nos. 8, 9, and 10 is constructed for unloading liquid reactive wastes, wastes that are not water reactive, but packed in liquids, and wastes that are water reactive and packed in liquids. The packing liquids are water or mineral oil which are non-hazardous materials. Trucks will not be allowed to enter areas within the containment structure which contain accumulated precipitation. Containment areas will be checked for standing water after each major rain event and during routine inspections. The purpose of the containment in the unloading area is to contain any liquids that may spill during unloading. No waste containers will come in contact with standing liquids. The ground surface around the staging area is graded to direct surface runoff from entering the area.

The preparation building is covered to prevent rainfall from entering the area. The ground surface around the preparation building is graded to direct surface runoff away from the area.

The ground surface around the concrete burn slab is graded to direct surface runoff from entering the area. A retractable roof is provided over the burners to prevent the entrance of direct rainfall. Small quantities of precipitation may be collected and temporarily stored in the polyethylene washwater tank prior to final disposition of the liquid. The treatment process will not be conducted during inclement weather and the wastes will not come into contact with standing liquids.

3. capacity of the containment system relative to the number and volume of containers to be stored;

Each storage magazine has the capacity to store approximately 5,000 pounds net explosive weight (NEW) of wastes. The total capacity for the 10 magazines at the facility is 50,000 pounds of wastes.

The covered staging area adjacent to Magazine Nos. 8, 9, and 10 and the parking area are designed for container storage. The purpose for the containment is to provide containment in the event of a spill or leak. The 16-inch concrete walls are designed to contain 10% of a maximum truckload of drums and moderate amounts of wind blown rainwater with approximately 3-inches of freeboard. For purposes of this permit application, a maximum truckload of drums would be equal to 4,400 gallons (80 55-gallon drums).

The covered storage area located at the rear of the preparation building may contain non-aqueous ash in appropriate containers until they are full and can be mobilized for transfer to an appropriate permitted facility. The 1500 gallon polyethylene tank is also located in this area. The 6-inch curbing will contain approximately 3,400 gallons of liquid and can more than adequately store the solid contents of the containers or the liquids within the polyethylene tank.

The containment system that surrounds each of the concrete burner pads will contain the contents of the burner trough or burner pot and moderate amounts of wind blown rainwater. The ground slab is gently sloped to the sumps located in the rear of the structure.

4. provisions for preventing or managing run-on;

The facility is located outside of a 100-year Floodplain limit. As indicated in the topographic map (see Appendix B of the August 2003 Part B permit renewal application) the natural drainage swales and ground surface contours direct surface water offsite.

Localized runoff management consists of grading the ground surface adjacent to the open burners, storage areas, and truck staging/parking areas to maintain positive drainage. This measure minimally impacts the overall site drainage pattern.

The storage magazines are fully enclosed and elevated above the ground surface by six inches.

The ash storage area, preparation building, staging/parking area, and the concrete burner pads are completely surrounded by a containment system and are elevated approximately 3-inches above the ground surface. The ground surface around these areas is graded to direct surface runoff or runoff away from the structure.

The truck parking/staging areas and the burners are provided with roofs to prevent the entrance of direct rainwater.

5. how accumulated liquids can be analyzed and removed to prevent overflow;

Trailers stored on site are inspected prior to placement in the storage area; the storage area is inspected immediately after removal of a trailer. Waste found during the inspection is immediately addressed. There is, therefore, no chance of contact of waste from a trailer with stormwater.

Magazines are covered and, therefore, protected from rain. Any leakage of liquid waste inside a magazine is addressed immediately.

The hazardous ash is kept in a designated area at the preparation building. It is in sealed containers and, therefore, not accessible to rainwater.

B. for storage areas that store containers holding wastes that do not contain free liquids, a demonstration of compliance with LAC 33:V.2111.C including:

1. test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and

Physical and chemical analyses are obtained from the generator. Additional knowledgeable sources that can provide analytical data include agencies such as the DOD, LDEQ, and LDPS. Profiles will be maintained at the facility for reference as part of the monitoring and surveillance procedures for verifying incoming waste shipments, as discussed in Chapter 9 and in Section 1519 of the August 2003 Part B permit renewal application.

The profiles will show if the wastes contain free liquids. All incoming waste shipments will be checked against the shipping manifest to verify the

acceptability of the wastes. A visual examination of incoming containers will also verify whether or not liquids are present.

2. *a description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids;*

The storage magazines are designed to prevent water or other liquids from potentially contacting the stored waste. The preventive measures are discussed below.

The containers of wastes are stacked on the floors of the storage magazines (except in the liquid storage magazines, discussed above). The floors are also elevated approximately six inches above the ground surface. The interior walls of the magazines are equipped with vents to prevent moisture accumulation. Pallets or other objects are stacked away from the vents. The ground surface is graded adjacent to the units to direct surface water away from the magazines.

- C. *sketches, drawings, or data demonstrating compliance with LAC 33:V.2113 (location of buffer zone and containers holding ignitable or reactive wastes) and LAC 33:V.2115.C (location of incompatible wastes), where applicable;*

The storage units and treatment units for the wastes are located no closer than 660 feet to the property lines of the facility. This distance exceeds the 50-foot requirement of LAC 33:V.2113. The buffer zones limits, the locations of the storage magazines, and treatment units are shown in Appendix B of the August 2003 Part B permit renewal application.

Incompatible wastes are identified as part of the procedures for monitoring incoming waste, as discussed in Chapter 9 and Section 1517 of the August 2003 Part B permit renewal application. Incompatible wastes will be stored in separate magazines to prevent accidental reaction with other wastes. The distances between the magazines meet the requirements of the ATF. A clear zone around the magazine area will be kept free of ignitable material in accordance with current ATF requirements. The waste activity reports will note the location of all wastes onsite to prevent accidental mixing of incompatible wastes. This information will become part of the operating record for the facility.

- D. *where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with LAC 33:V.2107.A-C, and 1517.B-D; and*

The wastes treated and stored at the facility are classified as hazardous primarily because of their reactive characteristic. Possible hazard to human health and the environment is associated with the spread of fires or explosions and airborne debris. Procedures for handling containers of reactive wastes to minimize the potential for accidental fires or explosions are discussed in the responses to Chapter 21 and Section 1519 of the August 2003 Part B permit renewal application.

The wastes arrive at the facility in DOT-approved containers. The containers of wastes are not sampled for analysis; waste acceptability is verified using waste characterization data sheets or other existing chemical and physical waste analyses. The containers are loaded and unloaded from the waste delivery vehicle into the storage magazines, preparation building, truck unloading, or burn pad and from these locations to the on-site transfer vehicles. The waste containers typically are not opened until the wastes are moved from the storage units to the treatment area. Waste movements and locations of wastes on-site are recorded in the waste activity report to prevent accidental mixing of reactive wastes in the storage units. The waste activity report is part of the operating record of the facility.

Incompatible wastes are stored in separate magazines to prevent accidental reaction. As discussed in the response to Sections 1517.A and B of the August 2003 Part B permit renewal application, the storage magazines are ventilated to minimize build-up of extreme heat or pressure that could cause accidental reaction and are vented to prevent moisture accumulation.

LAC 33:V.1517.C does not apply to this facility because it does not have any landfill or other burial units.

E. information on air emission control equipment as required in LAC 33:V.526.

All containers utilized for hazardous waste storage at the facility are kept closed except when necessary to add or remove waste. All containers are DOT approved. The facility also does not manage wastes containing organic constituents at levels greater than 500 ppm. As a result, no additional air emission control equipment is needed.

534. Specific Part II Information Requirements for Miscellaneous Units

Except as otherwise provided in LAC 33:V.3201, owners and operators of facilities that treat, store, or dispose of hazardous waste in miscellaneous units must provide the following additional information.

A. *A detailed description of the unit being used or proposed for use, including the following:*

1. *physical characteristics, materials of construction, and dimensions of the unit;*

The facility includes a truck parking/staging area, storage magazines, an operating area (consisting of a preparation building and the burning areas), and buffer zones between the operating area and adjacent property lines, as well as an adjacent administrative office. The facility layout is shown in Appendix B of the August 2003 Part B permit renewal application (Drawing # 103).

Storage magazines are designed in accordance with the requirements established by the Bureau of Alcohol, Tobacco, and Firearms. The magazines are 10 feet by 20 feet in area and 8 feet high. The interior roof, doors, floors, and walls are lined with hardwood paneling. Vents are installed to permit proper ventilation and to prevent the build-up of extreme heat or pressure. The ventilation openings are screened. The openings are turned downward to prevent rainfall from entering. In addition, the screens prevent the entry debris, insects, reptiles, small mammals, or other objects. The magazines are grounded to prevent the occurrence of an accidental fire or explosion from a lightning strike. The doors of the magazines are double locked with 5 tumbler locks that are covered with steel hoods. The design of the magazines is shown in Appendix B of the August 2003 Part B permit renewal application (Drawing #'s 109 and 110). A covered truck staging area is adjacent to the entrance of three of the storage magazines that are labeled as Nos. 8, 9, and 10 in Appendix B of the August 2003 Part B permit renewal application. The secondary containment at the truck staging area will contain any spills of liquids that may occur during transfer.

The preparation building is 40 feet wide by 40 feet long in plan area with a concrete apron at the entrance. The preparation building is supplied with electric power to operate the drill press and band saw used for preparation activities. All electrical switches, motors, controls, and lights conform to the requirements of Class II, Division 2 of the National Electric Code. A container storage area for hazardous ash is located at the rear of the preparation building. This area measures 18 feet wide by 60 feet long in plan with a 6" high berm to provide secondary containment. Generally, the only hazardous ash will be the minimal amounts of ash collected from the treatment of wastes that include listed waste codes (F, P, K, or U codes) since the treatment process typically removes any characteristically hazardous constituents.

A 1,500 gallon polyethylene tank is located adjacent to the storage area for the storage of washwater generated on-site during equipment decontamination, clean-up water from spills and possibly "de minimis" amounts of reactive and listed waste treated at the facility. The tank area measures 12 feet long by 10 feet wide with an 8" high curb on three (3) sides to provide secondary containment. The concrete floor of the tank area slopes toward and drains into the container storage area. The materials potentially stored in this tank will be considered site-generated; therefore, only generator standards will apply to this tank.

The thermal treatment area is constructed on a 700' by 130' reinforced concrete slab (6" thick). The thermal treatment units consist of twenty (20) concrete curbed treatment pads atop the slab, each equipped with an interchangeable burner assembly. The burner assemblies consist either of an open steel pan or a steel-lined concrete burn chamber. The open steel pans are constructed of 3/16-inch (minimum) steel with eight-inch high sidewalls. The concrete burn chambers are constructed of 48-inch (inside diameter) reinforced concrete pipe. They are three feet in length, and equipped with a 14-gauge steel cover plate. Each of the treatment units is equipped with a retractable roof structure to prevent rainfall accumulation.

- 2. detailed plans and engineering reports describing how the unit will be located, designed, constructed, operated, maintained, monitored, inspected, and closed to comply with the requirements of LAC 33:V.3203 and 3205; and*

The thermal treatment area is constructed on a 700' by 130' reinforced concrete slab (6" thick). The thermal treatment units consist of twenty (20) concrete curbed treatment pads atop the slab, each equipped with an interchangeable burner assembly. The burner assemblies consist either of an open steel pan or a steel-lined concrete burn chamber. The open steel pans are constructed of 3/16-inch (minimum) steel with approximately eight-inch high sidewalls. The concrete burn chambers are constructed of 48-inch (inside diameter) reinforced concrete pipe. They are four feet in height, and equipped with a steel mesh cover. Each of the treatment units is equipped with a retractable roof structure to prevent rainfall accumulation.

Security, communications, onsite emergency equipment, and procedures are described in Section 1513 of the August 2003 Part B permit renewal application.

Wastes are transferred from the storage area to the preparation building located adjacent to the treatment units using a utility vehicle and trailer. The wastes are loaded and unloaded from the trailer by appropriate means considering the type of material being unloaded.

The waste is opened and prepared to facilitate combustion and placed in a compatible container. The wastes are placed in the burners and soaked with diesel fuel. Diesel fuel is a low-volatile, slow burning fuel that helps to control the combustion process.

Each batch of waste requires approximately 7 to 8 minutes to burn. The maximum temperature obtained during the treatment process is achieved at a temperature of approximately 2,400 degrees Fahrenheit in a non-controlled air feed environment such as open trough burning. After approximately 40 minutes, the cooled

treatment residues are visually inspected to ensure they do not contain untreated waste. Subsequently, they are removed from the burners, and placed in appropriate containers until they are shipped offsite for disposal at a proper facility. The residues will be separated according to whether or not the waste was treated in burners designated for characteristic waste or burners designated for listed waste.

The inspection schedule for the treatment units as well as the support facilities is presented in Appendix H of the August 2003 Part B permit renewal application. The schedule is designed to permit a timely response to prevent or minimize potential malfunctions that could result from such factors as deterioration with age or improper operation. The goal in preparing the inspection schedule is to ensure that all operating and emergency equipment, structures, and systems are functioning and can be relied on, particularly in an emergency situation.

The schedules contain the frequency of inspection or maintenance activity, the item of equipment and the component of that equipment item that needs to be examined in addition to a general inspection. The inspection and maintenance schedules, results, and repair records will become part of the operating record.

Potential hazardous material release would be associated with spilling untreated wastes outside containment areas or treatment process areas. Spills in these areas would most likely occur during handling by facility personnel. Such spills are addressed by 1) visual inspections of these areas each time they are used and 2) collecting all observed spilled wastes for immediate thermal treatment.

The threat to human health and the environment would be associated with the occurrence of an unplanned or uncontrolled fire or explosion at the facility. Such hazards are unlikely but could possibly occur from improper handling or storage of the wastes, improper use of onsite equipment, or equipment malfunction. The inspection and maintenance schedules are designed to minimize this potential by visually examining the treatment units; storage magazines; the containers of waste; onsite transfer equipment; tools used to prepare the wastes for treatment; emergency response equipment; communications; and other operating equipment. The frequency of the inspections and maintenance requirements are based on manufacturer's recommendations when available. All maintenance and repairs will be completed prior to any future processing of waste on impaired equipment to ensure proper functioning of equipment and systems at all times.

3. for disposal units, a detailed description of the plans to comply with the post-closure requirements of LAC 33:V.3207.

Since the facility does not have disposal units, this section of the regulation is not applicable.

B. Detailed hydrologic, geologic, and meteorologic assessments and land-use maps for the region surrounding the site that address and ensure compliance of the unit with each factor in the environmental performance standards of LAC 33:V.3203. If the applicant can demonstrate that he does not violate the environmental performance standards of LAC 33:V.3203 and the administrative authority agrees with such demonstration, preliminary hydrologic, geologic, and meteorologic assessments will suffice.

A groundwater assessment was conducted as a requirement of the initial permit. That assessment has been completed and is included in Appendix U of the August 2003 Part B permit renewal application.

C. Information on the potential pathways of exposure of humans or environmental receptors to hazardous waste or hazardous constituents and on the potential magnitude and nature of such exposures.

The facility completed a risk assessment as part of the "Final Technical Support Document for the R&D Thermal Treatment System" dated April 1991 (Appendix W of the August 2003 Part B permit renewal application). No unacceptable risks were identified.

D. For any treatment unit, a report on a demonstration of the effectiveness of the treatment based on laboratory or field data.

The Institute of Makers of Explosives made the following observation in their response to EPA comments (December 1988) on the RCRA Guidance Manual For Permitting Commercial Explosives Industry Open Burning/Open Detonation Facilities (OB/OD).

"A critical aspect of this guidance manual and in general regarding disposal of explosive waste in the explosives industry is the issue of safety. IME has generally made the conservative assumption that waste containing elements of explosive nature presents the risk of an explosion. IME is not aware of a test method, nor has EPA promulgated a test method, that determines reactivity and that allows for a completely accurate determination of whether waste containing constituents of an explosive nature presents the risk of explosion upon disposal. It is such a risk that mandates the use of OB/OD since disposal through other means presents the risk of an explosion with a related threat to worker safety. The industry has

always made worker protection the highest priority and would be very uncomfortable in departing from that position now."

The facility will gather sufficient information on incoming waste streams to allow proper storage and treatment without compromising worker safety. Chemical and physical analyses of each type of waste are generally provided by the generator. These analyses or analyses obtained from other reputable sources, such as the Department of Defense, will be referenced in the incoming waste records for each type of waste accepted at the facility. This information will become part of the operating record for the facility.

E. Any additional information determined by the administrative authority to be necessary for evaluation of compliance of the unit with the environmental performance standards of LAC 33:V:3203.

Clean Harbors Colfax, LLC understands that LDEQ may request additional information as necessary to evaluate the compliance of the unit.

Chapter 15

Treatment, Storage, and Disposal Facilities

1501. Applicability

- A. *The regulations in this Chapter apply to owners and operators of all hazardous waste facilities, except as provided in LAC 33:V.1501.C. LAC 33:V.1503.B.3 applies only to facilities subject to regulations under LAC 33:V. Chapters 19, 21, 23, 25, 27, 29, 31, or 32.*
- B. *Except as specifically authorized by the terms and conditions of a permit issued under these rules and regulations, the construction and operation of a facility to treat, store, or dispose of hazardous wastes in violation of the standards established by this Section shall be a violation of the Act enforceable pursuant to LAC 33:V.107 of these regulations and R.S. 30:1073.*
- C. *The requirements of this Chapter do not apply to:*
1. *the owner or operator of a facility permitted, licensed, or registered to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation by LAC 33:V.108;*
 2. *the owner or operator of a facility which treats or stores material which would otherwise be a hazardous waste which is being beneficially used or reused, legitimately recycled, or reclaimed as defined in LAC 33:V.Chapter 41 (except to the extent they are referred to in LAC 33:V.Chapter 40 or Sections 4139, 4143, or 4145);*
 3. *Reserved;*
 4. *a farmer disposing of waste pesticides from his own use as provided in LAC 33:V.1101.D;*
 5. *the owner or operator of a totally enclosed treatment facility (see LAC 33:V.109);*
 6. *the owner or operator of an elementary neutralization unit or wastewater treatment unit (see LAC 33:V.109) provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in LAC 33:V.Chapter 22.Table 2, Treatment Standards for Hazardous Wastes) or reactive (D003) waste to remove the characteristic before land disposal, the owner/operator must comply with the requirements set out in LAC 33:V.1517.B;*
 7. *a. except as provided in Subparagraph C.7.b of this Section, a person engaged in treatment or containment activities during immediate response to any of the following situations:*
 - i. *a discharge of a hazardous waste;*
 - ii. *an imminent and substantial threat of a discharge of hazardous waste;*

- iii. *a discharge of a material that, when discharged, becomes a hazardous waste; or*
- iv. *an immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in LAC 33:V.109;*
- b. *an owner or operator of a facility otherwise regulated by this Chapter must comply with all applicable requirements of LAC 33:V.1511 and 1513;*
- c. *any person who is covered by Subparagraph C.7.a of this Section and who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this Chapter and 40 CFR 122-124 for those activities; and*
- d. *in the case of an explosives or munitions emergency response, if a federal, state, tribal, or local official acting within the scope of his or her official responsibilities or an explosives or munitions emergency response specialist determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA identification numbers and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition;*
- 8. *a transporter storing manifested shipments of hazardous waste in containers meeting the requirements applicable to the regulations of the Department of Public Safety on packaging, at a transfer facility for a period of 10 days or less, if so approved by the administrative authority;*
- 9. *the addition of absorbent material to waste in a container (see LAC 33:V.109), or the addition of waste to absorbent material in a container, provided that these actions occur at the time waste is first placed in the container and LAC 33:V.1517.B, 2103, and 2105 are complied with;*
- 10. *a generator accumulating waste on-site in compliance with LAC 33:V.1109.E;*
- 11. *universal waste handlers and universal waste transporters (as defined in LAC 33:V.3813) handling the wastes listed below. These handlers are subject to regulation under LAC 33:V.Chapter 38, when handling the below listed universal wastes:*
 - a. *batteries as described in LAC 33:V.3803;*
 - b. *pesticides as described in LAC 33:V.3805;*
 - c. *thermostats as described in LAC 33:V.3807;*
 - d. *lamps as described in LAC 33:V.3809; and*

- e. antifreeze as described in LAC 33:V.3811; or
12. LAC 33:V.5309 identifies when the requirements of this Chapter apply to the storage of military munitions classified as solid waste under LAC 33:V.5303. The treatment and disposal of hazardous waste military munitions are subject to the applicable permitting, procedural, and technical standards in LAC 33:V.Subpart 1.
 - D. The requirements of this Chapter apply to owners or operators of all facilities which treat, store, or dispose of hazardous wastes referred to in LAC 33:V.Chapter 22.
 - E. The requirements of this Chapter apply to a person disposing of hazardous waste by means of ocean disposal subject to a permit issued under the Marine Protection, Research, and Sanctuaries Act only to the extent they are included in a RCRA permit by rule granted to such a person under LAC 33:V.305.D.
 - F. The requirements of this Chapter apply to a person disposing of hazardous waste by means of underground injection subject to a permit issued under an Underground Injection Control (UIC) program approved or promulgated under the Safe Drinking Water Act only to the extent they are required by 40 CFR 144.14.
 - G. The requirements of this Chapter apply to the owner or operator of a POTW which treats, stores, or disposes of hazardous waste only to the extent they are included in a RCRA permit by rule granted to such a person under LAC 33:V.305.D.
 - H. The requirements of LAC 33:V.1105, 1503, 1504, 1507, 1509, 1511, 1513, 1515, 1517, 1519, and 3322 do not apply to remediation waste management sites. (However, some remediation waste management sites may be a part of a facility that is subject to a traditional RCRA permit because the facility is also treating, storing, or disposing of hazardous wastes that are not remediation wastes. In these cases, LAC 33:V.1509, 1511, 1513, and 3322 do apply to the facility subject to the traditional RCRA permit.) Instead of the requirements of LAC 33:V.1509, 1511, and 1513, owners or operators of remediation waste management sites must:
 1. obtain an EPA identification number by applying to the administrative authority using the department's Form HW-1;
 2. obtain a detailed chemical and physical analysis of a representative sample of the hazardous remediation wastes to be managed at the site. At a minimum, the analysis must contain all of the information which must be known to treat, store, or dispose of the waste according to LAC 33:V.Chapters 9-11, 15-29, and 31-37, and must be kept accurate and up to date;
 3. prevent people who are unaware of the danger from entering, and minimize the possibility for unauthorized people or livestock to enter onto the active portion of the remediation waste management site, unless the owner or operator can demonstrate to the administrative authority that:
 - a. physical contact with the waste, structures, or equipment within the active portion of the remediation waste management site will not injure people or

livestock who may enter the active portion of the remediation waste management site; and

- b. disturbance of the waste or equipment by people or livestock who enter onto the active portion of the remediation waste management site will not cause a violation of the requirements of this Section;*
- 4. inspect the remediation waste management site for malfunctions, deterioration, operator errors, and discharges that may be causing, or may lead to, a release of hazardous waste constituents to the environment, or a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment, and must remedy the problem before it leads to a human health or environmental hazard. Where a hazard is imminent or has already occurred, the owner/operator must take remedial action immediately;*
- 5. provide personnel with classroom or on-the-job training on how to perform their duties in a way that ensures the remediation waste management site complies with the requirements of LAC 33:V.Chapters 9-11, 15-29, and 31-37, and on how to respond effectively to emergencies;*
- 6. take precautions to prevent accidental ignition or reaction of ignitable or reactive waste, and prevent threats to human health and the environment from ignitable, reactive, and incompatible waste;*
- 7. for remediation waste management sites subject to regulation under LAC 33:V.Chapters 19, 21, 23, 25, 27, 29, 31, and 32, the owner/operator must design, construct, operate, and maintain a unit within a 100-year floodplain to prevent washout of any hazardous waste by a 100-year flood, unless the owner/operator can meet the demonstration of LAC 33:V.1503.B;*
- 8. not place any non-containerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine, or cave;*
- 9. develop and maintain a construction quality assurance program for all surface impoundments, waste piles, and landfill units that are required to comply with LAC 33:V.2303.C and D, 2503.L and M, and 2903.J and K at the remediation waste management site, according to the requirements of LAC 33:V.1504;*
- 10. develop and maintain procedures to prevent accidents and a contingency and emergency plan to control accidents that occur. These procedures must address proper design, construction, maintenance, and operation of remediation waste management units at the site. The goal of the plan must be to minimize the possibility of, and the hazards from, a fire, explosion, or any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment. The plan must explain specifically how to treat, store, and dispose of the hazardous remediation waste in question, and must be implemented immediately whenever a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment occurs;*

11. *designate at least one employee, either on the facility premises or on call (that is, available to respond to an emergency by reaching the facility quickly), to coordinate all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan;*
12. *develop, maintain, and implement a plan to meet the requirements in Paragraphs H.2-6 and 9-10 of this Section; and*
13. *maintain records documenting compliance with Paragraphs H.1 –12 of this Section.*

Clean Harbors Colfax, LLC acknowledges the applicability of this Chapter to its facility.

1503. Site Requirements

A. Geology

1. *Topographic Relief. The site should not have any abrupt topographic changes or means should be provided to guard against slides, slumping, or erosion.*

The facility is located on the Colfax USGS 7-1/2 minute topographic quadrangle. A copy of a portion of this quadrangle, marked with the site location, is presented as the land use map in Appendix B (Drawing # 102). As shown on the land use map and the Facility Layout and Contour Map (Appendix B), the ground surface adjacent to and within the facility boundaries consists of gently rolling hills. The ground surface is dissected by several gently sloping natural drainage swales. The potential for slides, slumping, or erosion to develop is minimal because of the quantity of vegetative cover and the lack of steep slopes or significant surface water discharge through the site.

2. *Soils. The area should be covered with natural stable soils of low permeability or a means should be provided, acceptable to administrative authority, which provide a barrier to penetration of surface spills or accumulations of hazardous wastes into a subsurface strata which would have a potential effect on a fresh-water aquifer.*

A surface soils map prepared for the site by the U.S. Department of Agriculture Soil Conservation Service and accompanying soil descriptions are presented in Appendix X. As indicated on the map, the surface soils in the central and east portions of the facility consist primarily of Rigolette-Kisatachie. The west part

of the site consists of Gore Silt Loam. The Caddo Silt Loam occurs northeast of the site. The Caddo Silt Loam and the Gore Silt Loam are low permeability soils. The Gore Silt Loam is characteristically moderately permeable. These soils are natural and stable. These soil conditions are considered to be satisfactory for the operations conducted at the treatment facility.

An environmental assessment has been conducted. This assessment verified the clayey nature and low permeability of the site soils (see Appendix U from the Part B Permit Application).

3. *Seismic Conditions. Portions of new facilities where treatment, storage, or disposal of hazardous waste will be conducted must not be located within 61 meters (200 feet) of a fault which has had displacement in Holocene time.*

The facility contacted the U.S. Geological Survey and the Louisiana Geological Service to obtain state and federal information regarding the occurrence of a known fault near the site. These agencies indicated that no known fault has been identified within the facility or 3,000 feet beyond the facility boundaries. A geological certification that the site complies with the seismic standards is presented in Appendix D (Part B Permit Application).

B. Hydrology

1. *General Requirement. Sites utilized shall be isolated by means of natural or created boundaries from adjoining land and from subsurface and surface waters.*

Drawings in Appendix B (Part B Permit Application) show the distances between waste management units and the existing property boundary. This distance, coupled with the low permeability soils, (see Section 1503.A.2) and the containerization of the waste (discussed below) effectively isolates the waste from land, surface waters, and subsurface waters.

Wastes are stored in fully-enclosed storage magazines. Treatment operations are conducted in at-grade open burners with concrete secondary containment. The residues resulting from thermal treatment of the wastes are collected and containerized for offsite disposal.

2. *Drainage. The site must have the capability to control and/or contain run-off from the maximum rainfall in 24 hours from a 25-year storm (when maximum rainfall records are not available, the design standard shall be 12 inches below 31 degrees North latitude and nine inches above 31 degrees North latitude) and must have the capability to divert run-on from adjoining land (outside limits of hazardous waste site or if part of an industrial complex, outside limits of company property) from such a storm from the site (surface and subsurface).*

Hazardous materials are handled only in limited areas. Each of these areas is either under roof or has curbing, containment, or storage capacity sufficient to handle the 9 inches of rain specified as the design storm for a 24 hour, 25 year event for this latitude.

3. *Floodplains*

- a. *A facility located in a 100-year floodplain must be designed, constructed, operated, and maintained to prevent washout of any hazardous waste by a 100-year flood unless the owner or operator can demonstrate to the administrative authority that:*
- i. *procedures are in effect which will cause the waste to be removed safely, before flood waters can reach the facility, to a location where the wastes will not be vulnerable to floodwaters; or*
 - ii. *for existing surface impoundments, waste piles, land treatment units, landfills, and miscellaneous units, no adverse effects on human health or the environment will result if washout occurs, considering:*
 - (a). *the volume and physical and chemical characteristics of the waste in the facility;*
 - (b). *the concentrations of hazardous constituents that would potentially affect surface waters as a result of washout;*
 - (c). *the impact of such concentrations on the current or potential uses of and water quality standards established for the affected surface waters; and*
 - (d). *the impact of hazardous constituents on the sediments of affected surface waters or the soils of the 100-year floodplain that could result from washout.*

The nearest 100-year Floodplain limits obtained from a FEMA map are outside the area shown in Appendix O (Part B Permit Application). The FEMA map is referenced in Section 517.B.3 and is in Appendix O. Because the facility is located outside the 100-year Floodplain limits, LAC 33:V.1503.B.3 does not apply to this facility. A review of FEMA maps available on-line as of June 2015 continues to show that the facility is not within the 100-year Floodplain limits.

4. *Hurricane-Prone-Areas. Sites located in an area which is historically subject to hurricanes shall be protected from the entry of water by natural or created barriers certified by a professional engineer.*

The climatology information in Appendix O (as discussed in Section 517.T.4.b.iii) demonstrates that the site is not subject to hurricanes. LAC 33:V.1503.B.4 does not apply to this facility.

5. *Conformity with Existing Restrictions and Permits. Sites located in floodways or wetlands under control of the U.S. Army Corps of Engineers and/or the Coastal Zone Management Office must apply for applicable permits. However, to avoid unnecessarily long licensing periods, the department may accept and process the application with its final approval dependent upon a similar approval. Final department action on such a state permit will be taken after final action on wetlands and coastal zone permits.*

The facility is located outside of a 100-year Floodplain. No jurisdictional wetlands have been identified in the operating area of the facility. A small area of other regulated waters was, however, filled under authority from Corps of Engineers Nationwide Permit No. 26 for headwaters and isolated water discharges. LAC 33:V.1503.B.5 does not apply to this facility.

6. *Areas of Critical Environmental Concern. Sites located in, or adjacent to, swamps, marshes, floodplains, estuaries, designated wildlife hatchery areas, habitats of endangered species, and similar critical environmental areas shall be isolated from such areas by effective barriers which eliminate possible adverse impacts on such areas due to operation of the facility.*

The facility is not located in, or adjacent to, areas of critical environmental concern, such as swamps, marshes, floodplains, estuaries, and habitats of endangered species. As such, LAC 33:V.1503.B.6 does not apply to this facility.

7. *Salt Dome Formations, Salt Bed Formations, Underground Mines, and Caves. The placement of any noncontainerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine or cave is prohibited.*

This section is not applicable because the site does not overlay a salt dome, salt bed, mine, or cave.

C. Facilities

1. *Transportation. Access to sites by surface and water transportation modes shall be by roads and waterways with the capacity to accept the demands created by the facility and designed to avoid, to the extent practical, congestion, sharp turns, obstructions, or other hazards which are conducive to accidents.*

The site is not accessible by waterway or rail. Access to the facility is by surface vehicular traffic from LA Highway 471.

The facility receives an average of approximately three trucks per week. The anticipated maximum traffic volume is 24 trucks per day, which is approximately three percent of the total traffic traveling on LA Highway 471, based on a 1995 traffic count. The maximum expected gross vehicle weight is approximately 80,000 pounds. The vehicle traffic to and from the facility does not significantly affect the service life or use of LA Highway 471. Vehicle traffic is expected to remain well below 24 trucks per day even with the increased capacity the facility is requesting.

The facility contains sufficient staging area along the interior access road from LA Highway 471 to the facility office. Use of the staging area will eliminate potential congestion at the site entrance. There are no sharp turns, obstructions, or other hazards at the site entrance off LA Highway 471 that would be conducive to accidents. The facility layout with the staging area locations is shown in Appendix B (Part B Permit Application).

2. *Services. Sites shall have convenient access to required services, including: utilities, medical care, police, fire protection, and similar services, or provide these services internally in a manner acceptable to the administrative authority.*

The facility has service lines for water, electricity, and telephone service from the main lines along LA Highway 471. A septic tank is located near the facility office and employee lunch trailer.

The main interior access road connects the facility to LA Highway 471. LA Highway 471 is easily accessed by the emergency response agencies servicing the site, which include the Grant Parish Sheriff Department, the Colfax Fire Department, and the Parish Ambulance Service. These services are located approximately four miles from the site.

3. *Buffer Zone*

- a. *General Requirement. Sites shall be shielded from adjoining noncompatible land uses by space, natural separation, or other means acceptable to the administrative authority.*

As indicated in Appendix B, the minimum width of the buffer zone is approximately 0.4 mile from the property lines to the treatment and storage areas. These buffer zones visually screen the operations at the facility from public view, provide a buffer against noise generated during storage and treatment operation, and minimize the impact of an unplanned event on adjoining land. The aerial photography and Land Use and Water Well Map also emphasize the remoteness of the site.

- b. *Minimum Requirements. In no event shall the buffer be less than that stated for the following sites:*

- i. *sites zoned industrially—sufficient space for security and drainage control facilities; or*

The facility is not zoned industrially. LAC 33:V.1503.C.3.b.i. does not apply.

- ii. *all other locations—200 feet between any facility (treatment pond, incinerator, tank, etc.) and property line unless a proper buffer is installed which is acceptable to the administrative authority (see LAC 33:V.2113 for container requirements).*

The minimum required buffer width will be maintained during the operating life of the facility.

1504. Construction Quality Assurance Program

A. CQA Program

1. *A construction quality assurance (CQA) program is required for all surface impoundment, waste pile, and landfill units that are required to comply with LAC 33:V.2903.J and K, 2303.C and D, and 2503.L and M. The program must ensure that the constructed units meet or exceed all design criteria and specifications in the permit. The program must be developed and implemented under the direction of a CQA officer who is a registered professional engineer.*
2. *The CQA program must address the following physical components, where applicable:*
 - a. *foundations;*
 - b. *dikes;*
 - c. *low-permeability soil liners;*
 - d. *geomembranes (flexible membrane liners);*
 - e. *leachate collection and removal systems and leak detection systems; and*
 - f. *final cover systems.*

B. Written CQA Plan. The owner or operator of units subject to the CQA program under LAC 33:V.1504.A must develop and implement a written CQA plan. The plan must identify steps that will be used to monitor and document the quality of materials and the condition and manner of their installation. The CQA plan must include:

1. *identification of applicable units and a description of how they will be constructed;*
2. *identification of key personnel in the development and implementation of the CQA plan and CQA officer qualifications;*

3. *a description of inspection and sampling activities for all unit components identified in LAC 33:V.1504.A.2, including observations and tests that will be used before, during, and after construction to ensure that the construction materials and the installed unit components meet the design specifications. The description must cover:*
 - a. *sampling size and locations;*
 - b. *frequency of testing;*
 - c. *data evaluation procedures;*
 - d. *acceptance and rejection criteria for construction materials;*
 - e. *plans for implementing corrective measures; and*
 - f. *data or other information to be recorded and retained in the operating record under LAC 33:V.1529.*

C. Contents of Program

1. *The CQA program must include observations, inspections, tests, and measurements sufficient to ensure:*
 - a. *structural stability and integrity of all components of the unit identified in LAC 33:V.1504.A.2;*
 - b. *proper construction of all components of the liners, leachate collection and removal system, leak detection system, and final cover system, according to permit specifications and good engineering practices, and proper installation of all components (e.g., pipes) according to design specifications; and*
 - c. *conformity of all materials used with design and other material specifications under LAC 33:V.2303, 2503, and 2903.*
2. *The CQA program shall include test fills for compacted soil liners, using the same compaction methods as in the full-scale unit, to ensure that the liners are constructed to meet the hydraulic conductivity requirements of LAC 33:V.2303.C.1.b, 2503.L.1.b, and 2903.J.1.b in the field. Compliance with the hydraulic conductivity requirements must be verified by using in situ testing on the constructed test fill. The administrative authority may accept an alternative demonstration, in lieu of a test fill, where data are sufficient to show that a constructed soil liner will meet the hydraulic conductivity requirements of LAC 33:V.2303.C.1.b, 2503.L.1.b, and 2903.J.1.b in the field.*

- D. Certification. Waste shall not be received in a unit subject to LAC 33:V.1504 until the owner or operator has submitted to the Office of Environmental Services, Permits Division by certified mail or hand delivery a certification signed by the CQA officer that the approved CQA plan has been successfully carried out, that the unit meets the requirements of LAC 33:V.2903.J or K, 2303.C or D, or 2503.L or M, and the procedure in LAC 33:V.309.L.3.b has been completed. Documentation supporting the CQA officer's certification must be furnished to the administrative authority upon request.*

The facility has no surface impoundments, waste piles, or landfill units that would be subject to LAC 33:V.1504; therefore, the requirements for a CQA do not apply.

1505. Discharges from the Site

A. General Requirements. All point-source discharges must be controlled and reported as follows:

- 1. water discharges, if any, must be in conformity with effluent limitations established by the Clean Water Act operating under an NPDES permit and reported as required by that permit. The NPDES Permit must be applied for prior to the issuance of a hazardous waste permit; or*

No process wastewater is generated as part of the treatment process. Natural and constructed drainage devices are used to divert surface run-on from the operations area.

As a practical measure, the ground surface and concrete pads supporting the burners are graded to direct surface runoff away from the burn units, the preparation building, and the storage magazines. Magazines Nos. 8, 9 and 10 have 12-inch high thresholds and vertical floor vent extensions to contain possible spills. Any minor spills of waste or waste treatment residue are removed as soon as they are discovered. These operational procedures prevent surface runoff from the operations area from becoming contaminated.

The facility has applied for and obtained a baseline general stormwater discharge permit from the USEPA. Pursuant to LAC 33:IX.2301.D.1, this permit has become an LPDES permit. Relevant documentation is included in Appendix C (Part B Permit Application).

- 2. air emissions, if any, must be in conformity with air limitations of the Clean Air Act administered by the Office of Environmental Services, Permits Division, operating under an Air Quality Permit as required, and reported as required by that permit. The air permit must be applied for prior to the issuance of a hazardous waste permit.*

The air quality permit for the treatment process is included as Appendix C (Part B Permit Application).

- B. Surface. Offsite shipments of any hazardous waste material, containers, packaging, or similar material must be reported on a manifest and must be delivered to a permitted facility.*

Off-site shipments of any hazardous waste material, containers, packaging, or similar material will be reported on a manifest and will be delivered to a permitted facility.

C. Spills

1. *Any spill of hazardous waste which could possibly endanger health or adversely affect the environment off-site shall be reported to the department immediately as provided in the "Notification Regulations and Procedures for Unauthorized Discharges and Spills." (See LAC 33:I.Chapter 39)*

The facility acknowledges this requirement and will report any spill of hazardous waste which could possibly endanger health or adversely affect the environment off-site shall be reported to the Department immediately as provided in the "Notification Regulations and Procedures for Unauthorized Discharges and Spills." (See LAC 33:I.Chapter 39).

2. *If a spill occurs on the site of a generator or TSD facility, and if that spill could endanger the public health or affect the environment off-site, the department and the Department of Public Safety have the authority to enter the site and investigate the spill. It is the responsibility of the operator to report spills of this nature to the department and the Department of Public Safety as soon as possible, as provided in LAC 33:V.1505.C.1.*

If a spill occurs on the site that could endanger the public health or affect the environment off-site, the department and the Department of Public Safety will have the authority to enter the site and investigate the spill. Clean Harbors Colfax, LLC will report spills of this nature to the Department and the Department of Public Safety as soon as possible, as provided in LAC 33:V.1505.C.1.

3. *Any spilled material or material trapped in sumps that is a hazardous waste or that will be disposed of as a hazardous waste must be cleaned up in a timely manner.*

Sumps are only used in the Truck Staging/Parking Area and Storage Magazine/Truck Storage Area. The sumps are depicted on Drawing # 107 (Appendix B) for the former and Drawing # 108 (Appendix B) for the latter. These sumps are used to provide access with a pump or vacuum hose to remove spilled material. If spilled material is contained in a sump, it will be removed immediately upon discovery.

1507. Security

- A. *General Requirements.* The security system shall insure that site ingress and egress by the public is controlled and that employees are protected from hazards to health resulting from contact with extremely hazardous operations.

The security system for the facility is consistent with the size of the facility, level of activity, number of employees, the type of waste handled, and the nature of the storage and treatment processes. The layout of the physical security arrangements to control ingress and egress at the facility is shown in Appendix B.

Access to the facility from LA Highway 471 is directed through a fence which has one gated entry point. All vehicles entering the site must pass through this gate. Vehicular access into the permitted operating area is controlled by a second fence and gate that separate the site entrance and office area from the operating area. The north, south, west, and east site boundaries are fenced and border on undeveloped property that is well-vegetated with trees and brush. Access to the hazardous waste site is restricted by the perimeter fence and locked gate. The storage magazines are also locked in accordance with the applicable standards published by the Bureau of Alcohol, Tobacco, and Firearms.

- B. *Perimeter Control.* The natural or created barrier to site ingress or egress around the entire perimeter of the hazardous waste area shall be continuously patrolled or monitored. Equipment will be installed, as necessary, to keep birds and wildlife off the site.

The facility has installed a six-foot high wire fence along the site boundaries. The six-foot high fence is equipped with a six-foot high metal rail gate that is locked when the facility is closed. Unauthorized access through the site boundaries other than the boundary fronting LA Highway 471 is additionally restricted by the natural vegetation which consists of trees and brush. The properties adjacent to these boundaries of the facility are undeveloped, heavily vegetated, and have limited access.

The storage magazines, preparation building and burners are further enclosed by a six-foot high chain-link perimeter fence with barbed wire on top. The six-foot high fence gate is locked. The storage magazines are locked in accordance with the standards established by the Bureau of Alcohol, Tobacco, and Firearms for magazines. A 100-foot wide clear zone is located between the units and the enclosure fences to allow patrolling and monitoring.

Access by birds and other wildlife is not a critical concern of this facility because wastes are securely stored in the magazines until treatment. The magazines are locked and located within a six-foot high fence enclosure.

The Grant Parish Sheriff's Department patrols LA Highway 471 daily and may visually check that the property entrance gate and fence are secure during non-operating hours. It should be noted that during non-operating hours, the facility is manned by security personnel or monitored remotely via security cameras. When present, the security guard routinely makes rounds to verify that the perimeter of the hazardous waste operating area remains secure. The perimeter checks occur no less than twice per shift.

- C. *Entry. Each entry through the perimeter barrier shall be manned at all hours. The entry should be opened by security personnel or by an electronic system (card, code, handprint, etc. or television monitor) acceptable to the administrative authority.*

The main perimeter barrier is monitored during normal working hours by administrative office personnel. A security guard monitors entry to the facility (either on-site or remotely via cameras) at all periods when the administrative offices are not occupied.

- D. *Alternate Means of Meeting Security Requirements. Any operator may petition the administrative authority for acceptance of equivalent alternative means of meeting the requirements of LAC 33:V.1507 in whole or in part. This shall be done through submission of proof that necessary procedures for the protection of health and property are provided by other means and that representatives of local fire and police departments, if any, are adequately informed of such means.*

Clean Harbors Colfax, LLC is not proposing an alternate means of meeting the security requirements at this time.

- E. *Perimeter Barrier. A constructed barrier shall enclose the entire hazardous waste site and shall have the capability to deny unauthorized or unknowing ingress or egress and to prevent entry by domestic livestock.*

The hazardous waste site is enclosed by a six-foot high chain link fence as shown in Appendix B. This provides the ability to deny unauthorized or unknown ingress or egress and to prevent entry by domestic livestock.

- F. *Perimeter Clear Zone. A clear, lighted path shall be constructed and maintained inside the perimeter barrier to permit patrol by vehicle or foot.*

As shown in Appendix B, a 100-foot clear zone is maintained between units and the hazardous waste site perimeter fence. This clear zone is also evident on the aerial photograph.

Lights are provided at the gated entry to the facility and the hazardous waste site. Each light is equipped with a photo-electric sensor for automatic operation. The condition of the sensors and the lights are checked regularly in accordance with the inspection schedule presented in Section 1509 of this permit application. Clear zones are provided between the units and the hazardous waste site perimeter fence, as described in Section 517.B.7., to permit access to these areas by emergency vehicles and personnel.

G. Required entry facilities include the following:

- 1. gate at each entry point equipped with secure locking device;*

The gate at each entry point is equipped with a secure locking device.

- 2. gate house for guard, or electromechanical equipment permitting controlled access; and*

The main gate to the facility is equipped with a electromechanical equipment permitting controlled access.

- 3. floodlighting at each entry to insure a well-lighted, safe, and secure area at night.*

Lights are provided at the facility entrance, at the entrance to the operating area, and at the hazardous waste site.

H. Emergency Response Facilities

- 1. Communications. An alarm system with controls accessible to each area of potential spill, explosion, or fire; telephone contact to each facility location; two-way radios for key personnel; and*

Two-way radios are the primary means of communication with the burn area. Radio base stations are located at the administration building and the control room overlooking the burn area. Personnel use hand held radios to communicate anywhere on the site. Attempts would not be made to fight any explosions or fires that might occur due to the nature of the material. The facility does not have any electronic alarm systems near the waste storage areas or treatment areas due to the

nature of the materials. The hand held radios are used to alert other personnel of problems, when necessary.

- 2. Fire Control. Portable fire extinguishers, decontamination facilities, fire control equipment at incinerators, mixing and treatment vats; and other fire-hazard facilities and fire hydrants (with capacity as required by state fire code) located not more than 200 feet from each fire-hazard facility.*

The type and onsite location of firefighting equipment are shown on Appendix I (Part B Permit Application) and discussed in the Contingency Plan presented in Appendix I. Fire extinguishers are located at the facility office, at the burn area, truck staging, and at the preparation buildings. Fire extinguishers are considered spark producing devices and are not permitted to be stored within 50 feet of the storage magazines. A fire disk and tractor are kept onsite that can be used for fire control.

Water hoses are located in the burning areas. Water, when needed, is pumped from the pond near the facility office. Due to the reactive nature of the waste being treated, the SOP for fighting a fire of the waste itself includes maintenance of clear zones and allowing the fire to burn out, rather than active close-in fire fighting.

Clear zones are provided around the storage magazines and the burning areas to permit access by emergency equipment and crews.

I. Safety Control Devices

- 1. Moving Equipment Barriers. Steel or concrete posts or barriers capable of stopping trucks or other equipment used on the site (at maximum expected speed) shall be installed to protect all hazardous waste above-ground pipelines, valves, or other containers located adjacent to roadways.*

The storage magazines containing the untreated wastes are the only on-site structures where moving equipment could potentially be a hazard. Trucks delivering wastes to these magazines and onsite waste transfer vehicles are permitted to travel at a maximum speed of 15 miles per hour within the facility boundaries. The storage magazines are sturdy structures built to the standards of magazines established by the Bureau of Alcohol, Tobacco, and Firearms. No additional barriers are considered necessary due to the heavy duty construction of the magazines.

- 2. Personnel Barriers. Barriers shall be installed at all locations where employees or visitors normally come in contact with ponds, lagoons, incinerators, treatment facilities, and other high-hazard locations.*

Personnel barriers are located around the two critical waste activity areas in the facility: the storage magazines and the burning areas. The fence enclosing the treatment and storage areas is six-foot in height and topped with barbed wire. The fence entrance consists of six-foot high rail gates. The gate is locked when access needs to be controlled.

J. Exterior Lighting

- 1. All personnel barriers shall be lighted; all vehicle barriers shall have reflectors.*

Security lights are located at the entry gate into the facility from LA Highway 471 and at the gate through the fence separating the operating area and the office area. Security lights are located in the storage and treatment areas. All vehicle barriers have reflectors.

- 2. Entry gates shall be lighted (see LAC 33:V.1507.G.3).*

The gates for the site entrance, the operating area, and the burning areas are illuminated by security lights.

- 3. Perimeter barriers shall be lighted (see LAC 33:V.1507.B).*

The perimeter barrier for the hazardous waste site is the fence immediately surrounding the hazardous waste site. The operating area occupies less than one-third of the total 622.80 acres of the facility and is located away from the facility boundaries. There is an interior perimeter fence that actually surrounds the 43 acres utilized for hazardous waste activities. These areas are lighted at night. The storage areas, in particular, are well lighted at night in accordance with applicable ATF requirements.

- K. Signs. A sign with the legend "Danger - Unauthorized Personnel Keep Out" must be posted at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to be seen from any approach to this active portion but in no case shall the spacing be greater than 200-foot intervals. The legend must be written in English and in any other language predominant in the area surrounding the facility, and must be legible from a distance of at least 25 feet. Existing signs with a legend other than "Danger - Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.*

Warning signs are posted at regular intervals as required by the regulations along the fence enclosing the burning areas. The legend on the signs is "DANGER - UNAUTHORIZED PERSONNEL KEEP OUT." Similar signs are posted at each corner of the storage magazines, on each corner of the fence enclosure, and at the gate between the operating area and the facility office area. Signs warning of smoking and open flame are located at the gate entering the operations area.

1509. General Inspection Requirements

A. The owner or operator must inspect his facility for malfunctions and deterioration, operator errors, and discharges which may be causing or may lead to:

1. a release of hazardous waste; or

Any potential hazardous release would be associated with spilling untreated wastes in the treatment areas where they could cause an unplanned event. Spills in these areas would most likely occur during handling by facility personnel. Such spills are addressed by 1) visual inspections of these areas each time they are used and 2) collecting all observed spilled wastes for immediate thermal treatment. Possible spills within magazines 8, 9, and 10 will be contained by the portable containment skids or by the secondary containment provided in each unit.

2. a threat to human health.

[NOTE: The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.]

The inspection and maintenance schedules include visually examining the storage magazines; the containers of waste to check for possible leaks onsite; onsite transfer equipment; tools used to prepare the wastes for treatment; emergency response equipment; communications; and other operating equipment. The frequency of the inspections and maintenance requirements are based on manufacturer's recommendations when available. All maintenance and repairs will be completed in a timely fashion to ensure proper functioning of equipment and systems at all times.

B. Schedule. LAC 33:V.517.G requires the inspection schedule to be submitted with Part II of the permit application. The administrative authority will evaluate the schedule along with the rest of the application to ensure that it adequately protects human health and the environment.

The schedule is included in Appendix H (Part B Permit Application).

1. *The owner or operator must develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.*

In accordance with LAC 33:V.517.G, the inspection schedule (see Appendix H) is included with this permit application. The inspection schedule is based on manufacturer's recommendations whenever possible and is designed to prevent deterioration or malfunction of onsite operating and emergency equipment and structures that could lead to the occurrence of an accidental or uncontrolled fire or explosion or hinder the efforts of emergency personnel. As part of the inspection procedures, the containers containing waste will be visually checked for leaks that could potentially cause an accidental fire or explosion. All safety and emergency equipment, security devices, and other pertinent items are included in the routine inspection requirements.

2. *He must keep this schedule at the facility.*

The inspection schedule will be kept at the facility.

3. *The schedule must identify the types of problems (e.g., malfunctions or deterioration) which are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).*

The inspection schedule presented in Appendix H lists specific problems and items to be checked for each piece of operating and emergency equipment; storage, preparation, and burning units; and the communication systems. Inspection personnel will note their findings on the inspection report. The report will also include descriptions of service or repair actions taken during the inspection or that need to be taken to ensure proper functioning of all equipment and systems.

4. *The frequency of inspection may vary for the items on the schedule. However, inspections should be based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunction or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the terms and frequencies called for in LAC 33:V.1709, 1719, 1721, 1731, 1753-*

1765, 1907, 1911, 2109, 2309, 2507, 2711, 2907, 3119, and 3205, where applicable.

[Comment: LAC 33:V.517.G requires the inspection schedule to be submitted with Part II of the permit application. The department will evaluate the schedule along with the rest of the application to ensure that it adequately protects human health and the environment. As part of this review, the department may modify or amend the schedule as may be necessary.]

The frequency with which items or problems are to be inspected is listed on the inspection schedule presented in Appendix H. The inspection frequencies are based, whenever possible, on the recommendations by equipment manufacturers. The personnel completing the inspection reports will note the date and time of the inspection. The inspector will sign the inspection form.

The storage and treatment areas as well as the loading and unloading areas will be visually inspected each operating day. The containers of wastes will be checked for leaks. The date, time, and the results of each visual inspection will be noted on the inspection report and entered into the operating record of the facility.

The inspection will also include spill control equipment and other emergency response equipment.

- C. The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals; a schedule must be set up to ensure that the problem does not lead to an environmental or human health hazard. When a hazard is imminent or has already occurred, remedial action must be taken immediately.*

The operator will service or repair all observed equipment malfunctions or deteriorations identified during each inspection. Leaking containers of wastes will be repackaged or removed for immediate thermal treatment. The information noted in the inspection report will include the condition of all equipment and areas examined, what immediate action was taken as a result of the inspection, and/or what future action is necessary to ensure the continued proper functioning of equipment and systems. A schedule and description of necessary activities to complete future repairs will be included in the report. The future repair work will be completed in a timely manner to minimize potential hazards to facility personnel, the public, and the environment.

- D. The owner or operator must record inspections in an inspection log or summary. He must keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name*

of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

All inspection, maintenance, and repair activities will be described in an inspection report and will be referenced by time, date, and the name(s) of the facility personnel completing the inspection or repair and maintenance work. These reports will be maintained at the facility and will become part of the operating record of the facility. The records will be kept for at least three years to comply with LAC 33:V.1509.D and LAC 33:V.1529.

1511. Preparedness and Prevention

- A. Applicability. The regulations in this Section apply to owners and operators of all hazardous waste facilities.*
- B. Design and Operation of a Facility. Facilities must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.*

Hazards to human health and the environment from storing and treating wastes are associated with the occurrence of unplanned events. The operator is committed to making the treatment facility as safe as possible to protect the facility personnel, the public, and the environment. Plans and procedures presented in this permit application for inspection, maintenance, and operation of the facility address the importance of minimizing potential occurrences of unplanned or uncontrolled fires or explosions.

The wastes are stored in properly designed storage magazines that are well-ventilated to minimize the build-up of extreme heat or pressures. As shown in Appendix B, the storage and treatment areas are located a sufficient distance apart based on ATF requirements to limit the potential for an incident at one location to spread to the other. Other measures to minimize potential spread of fire or explosion include fire lanes around the treatment and storage areas; visual monitoring of the burn area, preparation, and treatment activities; development of a contingency plan and emergency response procedures in coordination with offsite local and state emergency response agencies; proper inspection and maintenance of onsite operating equipment; and established buffer zones at least 660 feet wide between site boundaries and waste storage and treatment units.

- C. Required Equipment. All facilities must be equipped with the following, unless it can be demonstrated to the administrative authority that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:*

1. *an internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;*

Electrical alarm systems cannot be used at the storage magazines and cannot be active in the treatment areas when untreated wastes are present. In the event of any emergency situation, information related to actions to be taken will be relayed to other employees either directly by voice or via two-way radio or telephone (for employees not in the immediate area).

As part of the personnel training program, presented in Appendix K (Part B Permit Application) and discussed in Section 1515, and the onsite emergency response procedures, discussed in Sections 1513 and 1525, the employees are trained on the appropriate immediate actions they are to take when an emergency exists.

2. *a device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;*

As discussed in the Contingency Plan (Refer to Appendix I), the facility office is equipped with a telephone and a two-way radio base station. Emergency contact numbers are posted at the location of each telephone. The control room also has a base station radio, and personnel on site use hand held radios to communicate.

3. *portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and*

As discussed in the Contingency Plan, portable fire extinguishers are located at the entrances to the burn areas, at the preparation building, and at the office. Fire extinguishers are not located within 50 feet of the storage magazines. Other fire control equipment, such as water hoses, the tractor, and fire rake, are located in or near the storage areas.

Spill control equipment consisting of brooms, shovels, rakes and containment drums are available to collect spills of solid waste. In addition, absorbent materials are maintained to aid with the containment of any spilled liquid wastes. Equipment cleanup procedures typically involve water washing the tools used to collect spilled wastes. All spill control equipment will be made of a non-spark material to prevent the ignition of the waste. Any spilled liquid materials will be addressed utilizing an appropriate absorbent material followed by removal of the spilled material utilizing brooms, shovels or other applicable means.

Personnel protection equipment consisting of half face and full face respirators, safety glasses, hard hats, tyvek suits and gloves will be available for use by personnel during spill cleanup.

The types and location of the emergency equipment and cleanup procedures are discussed in detail in the Contingency Plan referenced in Section 1513 and included as Appendix I.

- 4. water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.*

Due to the explosive nature of waste being burned, no attempt is made to fight a fire in any waste area; rather, the fire is allowed to burn out.

D. Testing and Maintenance of Equipment. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

The applicant has prepared an inspection schedule for all onsite operating and emergency equipment, personnel protection equipment, and communication and monitoring systems to assure proper functioning, particularly in emergency situations. The inspection schedule is presented in Appendix H and discussed in Section 1509 of this permit application. The inspection reports, maintenance and repair records will become part of the operating record for the facility, as required by LAC 33:V.1529.

E. Access to Communications or Alarm System

- 1. Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless it can be demonstrated to the administrative authority that such a device is not required.*

The most likely hazards to occur when handling the wastes are sudden or uncontrolled fires or explosions. Communication devices, such as two-way radios and telephones, will be utilized. The facility will rely on visual and voice contact to verify the safety of personnel handling the wastes.

Two-way radio communication is maintained by the use of base stations at the administrative office and the control building, and hand held radios throughout the site.

2. *Anytime there is at least one employee on the premises while the facility is operating, he must have immediate access to a device such as a telephone, immediately available at the scene of operation, or a hand-held two-way radio, capable of summoning external emergency assistance, unless it can be demonstrated to the administrative authority that such a device is not required.*

As discussed in Section 1516.E.1 above, and the Contingency Plan, presented in Appendix I of this permit application, a telephone and radio at the office can be used to summon immediate assistance as required. Two-way radios are carried by the operating personnel and provide communication to all parts of the site.

- F. *Required Aisle Space. The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless it can be demonstrated to the administrative authority that aisle space is not needed for any of these purposes.*

The aisle space between the storage magazines and the surrounding fences is at least 100 feet wide. These aisle spaces are clear zones to provide adequate access to each storage area by emergency crews and equipment and to minimize the potential spread of fire or explosion. Aisle spaces within the magazines are approximately three feet wide.

The aisle space is approximately 100 feet between the open burners and the fence enclosing the treatment areas. The open burners are located approximately 50 feet apart. These aisle spaces provide adequate access by personnel and offsite and onsite emergency equipment.

A 20-foot wide clear zone is located adjacent to the preparation building to provide sufficient access by emergency personnel and equipment to all sides of the structure.

The access road from LA Highway 471 to the storage and treatment areas is at least 20 feet wide. The access road width is more than adequate to permit

unobstructed passage of emergency equipment and personnel to all active areas on the facility.

G. Arrangements with Local Authorities

- 1. The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations:*

The applicant has contacted the following local, state, and federal agencies that have jurisdiction in the area or that would be asked to respond to assist in an emergency:

- **Grant Parish Sheriff Department**
- **Verda Volunteer Fire Department**
- **Colfax Fire Department**
- **Parish Ambulance Service**
- **Grant Medical Center**
- **Grant Parish Emergency Planning Committee**
- **Louisiana State Police - Emergency Response**

The Contingency Plan as discussed in Section 1513 discusses how these agencies interact with each other and with onsite personnel, as well as when they are contacted, who makes the contact, and what information is to be provided these agencies when asked to assist.

- a. arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes;*

The applicant has contacted the following local, state, and federal agencies that have jurisdiction in the area or that would be asked to respond to assist in an emergency:

- **Grant Parish Sheriff Department**
- **Verda Volunteer Fire Department**
- **Colfax Fire Department**
- **Parish Ambulance Service**
- **Grant Medical Center**
- **Grant Parish Emergency Planning Committee**
- **Louisiana State Police - Emergency Response**

The Contingency Plan presented in Appendix I discusses how these agencies interact with each other and with onsite personnel, as well as when they are contacted, who makes the contact, and what information is to be provided these agencies when asked to assist.

b. where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

In accordance with the Contingency Plan, the Colfax Fire Department and the Grant Parish Sheriff's Department will be the primary outside local authorities that would respond to an emergency situation at the facility. The operator has made arrangements with these agencies whereby they will obtain assistance from, and direct the actions of, nearby fire and police departments, if needed. The Grant Parish Sheriff's Department has agreed to coordinate the actions of all local and nearby emergency agencies that may be called in to assist in an emergency situation. These agreements and arrangements are discussed in the Contingency Plan.

c. agreements with state emergency response teams, emergency response contractors, and equipment suppliers; and

During an emergency situation, the applicant will contact the Louisiana Departments of Environmental Quality and Public Safety in accordance with the requirements of the Louisiana Administrative Code and the Contingency Plan presented in Appendix I of this permit application. Coordination of, and arrangements with state emergency agencies are discussed in the Contingency Plan and in the Emergency Response Procedures presented in Appendix I and Section 1525.

d. arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

As noted in the facility Contingency Plan, Grant Medical Center, and Parish Ambulance Service have been asked to agree to assist during an onsite emergency. Emergency personnel from these agencies will be asked to participate in the portions of the training program that address medical emergencies, facility operations, waste streams, potential hazards, and in practice drills.

2. *Where state or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.*

If any of the local authorities decline to enter into such arrangements at some point in the future, the refusal will be documented in the operating record.

1513. Contingency Plan and Emergency Procedures

A. Purpose and Implementation of Contingency Plan

1. *Each owner or operator must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.*

Clean Harbors Colfax, LLC has a Contingency Plan for the facility that details procedures to be followed in the event of an emergency. These procedures are designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to the air, soil, or surface water. The Contingency Plan is located in Appendix I of this permit renewal application.

2. *A contingency plan to be implemented in the event of an emergency shall be filed with the Office of Environmental Services, Permits Division and, after approval, with the local fire and police departments (if any operate in the area), hospitals and emergency response teams operating in the area which are subject to call by the operator or the department.*

The Contingency Plan is included as Appendix I of this permit application. All appropriate local emergency response organizations have been provided with a copy of the Contingency Plan as required. The facility maintains copies of the Contingency in the General Manager's Office, the Operations Manager's Office, and in the Guard House, as well as the Control Room near the Burn Unit.

3. *The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.*

In the event of a fire, explosion, or accidental materials release, an assessment of the situation by the designated Emergency Coordinator or alternate is made and a decision is reached whether or not to implement the Contingency Plan. The Plan is implemented immediately if human health or the environment is threatened due to fire, explosion, release of hazardous waste or hazardous waste constituents.

- 4. The plan shall be revised each time the facility operations are changed due to expansion, change in type or quantity of waste handled, or other changes which affect the degree or type of possible emergency situation.*

The facility will revise the Contingency Plan as appropriate if any of the above referenced circumstances occur.

B. Content of Contingency Plan

- 1. The contingency plan must describe the actions facility personnel must take to comply with LAC 33:V.1513.B and F in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.*
- 2. If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with these requirements.*
- 3. The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services.*
- 4. The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator, and this list must be kept up to date. When more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates. For new facilities, this information must be supplied to the administrative authority at the time of certification, rather than at the time of permit application.*
- 5. The plan must include a list of all emergency equipment (where required) at the facility, such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list and a brief outline of its capabilities.*

6. *The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. The plan must describe signals to be used to begin evacuation, evacuation routes, and alternate evacuation routes.*

The facility's Contingency Plan conforms to the requirements of this subsection. The actions required by facility personnel and emergency responders are described in detail in the Contingency Plan (Appendix I).

C. Copies of Contingency Plan

1. *The contingency plan must be submitted to the Office of Environmental Services, Permits Division with the permit application and, after modification or approval, will become a condition of any permit issued.*

A copy of the Contingency Plan is located in Appendix I.

2. *A copy of the contingency plan and all revisions to the plan must be maintained at the facility and additional copies must be submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services.*

All local emergency response authorities as identified in the Contingency Plan have been provided with a copy of the most recent version of the Contingency Plan. At least one copy of the Contingency Plan is available at the facility at all times.

D. Amendment of Contingency Plan. The contingency plan must be reviewed, and immediately amended, if necessary, whenever:

1. *the facility permit is revised;*
2. *the plan fails in an emergency;*
3. *applicable regulations are revised;*
4. *the facility changes its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;*
5. *the list of emergency coordinators changes; or*
6. *the list of emergency equipment changes.*

As specified in the Contingency Plan, the plan is subject to review and/or revision when any of the above referenced items occur.

E. Emergency Coordinator. At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures (see LAC 33:V.1513.F). This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

The Contingency Plan specifies that the Emergency Coordinator (or alternate) is responsible for coordinating all emergency response measures during an emergency. The Emergency Coordinator or alternate is always on call and is thoroughly familiar with all aspects of the facility's Contingency Plan, all operations and activities at the facility, the locations and characteristics of the wastes handled, the location of all records within the facility and the facility layout. In addition, the Emergency Coordinator has been granted full authority to commit the necessary resources needed to implement the Contingency Plan.

F. Emergency Procedures

- 1. Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:*
 - a. activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and*
 - b. notify appropriate state or local agencies with designated response roles if their help is needed.*

In case of an imminent or actual emergency situation, the person observing the incident will notify the Emergency Coordinator (or alternate). He will report on the location and nature of the incident. The Emergency Coordinator will then activate all further communications procedures in order to properly notify all personnel of the emergency incident.

The Emergency Coordinator will notify, as needed, the National Response Center, the Louisiana Hazardous Substances Emergency Response Team, and other emergency response agencies identified in the Contingency Plan.

2. *Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and aerial extent of any released materials. He may do this by observation or review of facility records or manifest, and, if necessary, by chemical analysis.*

The Emergency Coordinator (or alternate) will determine the character, source, and extent of any released materials by visual inspection, sample analyses, waste profile sheets, and other available sources of information. He will determine the origin of the leak, the condition of the source (e.g., repairable leak, uncontrollable leak, easily moved, unmovable, etc.), container identification, the physical properties of the material, and any noticeable reactions.

3. *Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).*

After any released materials have been identified to the fullest extent practical, the Emergency Coordinator will assess possible hazards, both direct and indirect, to human health and the environment, and subsequently notify appropriate site personnel and authorities, as well as take action to mitigate such release. The Emergency Coordinator will also assess any fire situation with respect to hazards to human health or the environment and will take appropriate action. Refer to Appendix I for additional details.

4. *If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility, he must report his findings as follows:*
 - a. *if his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and*
 - b. *he must immediately notify the state official designated as the on-scene coordinator for that geographical area and provide:*
 - i. *name and telephone number of reporter;*
 - ii. *name and address of facility;*
 - iii. *time and type of incident (e.g., release, fire);*
 - iv. *name and quantity of material(s) involved, to the extent known;*

- v. *the extent of injuries, if any; and*
- vi. *the possible hazards to human health or the environment, outside the facility.*

If the Emergency Coordinator determines that an evacuation of local areas is advisable, he will notify the appropriate authorities. He will immediately notify the Louisiana DEQ Emergency Hot Line and give his name and telephone number; name and address of the facility; time and type of incident; name and quantity of material(s) involved, to the extent known; the extent of injuries, if any; and the possible hazards to human health or the environment, outside the facility.

- 5. *During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.*

The Emergency Coordinator will establish a command post and take control of the affected area and will commit the resources necessary until the emergency has been eliminated and cleanup or restoration is initiated. The Emergency Coordinator will see that operations are stopped as needed and that any released waste is contained and collected in order to ensure that fires or explosions do not spread.

- 6. *If the facility stops operation in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.*

In the event that the facility stops operations in response to an emergency, continuous monitoring will take place to ensure that leaks or other potential sources of a release are mitigated properly and as quickly as practical.

- 7. *Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil, or surface water, or any other material that results from a release, fire, or explosion at the facility. Unless the owner or operator can demonstrate that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements.*

Any wastes spilled at the facility will immediately be remediated. The facility will determine whether or not the waste is hazardous and will manage it accordingly.

8. *The emergency coordinator must ensure that in the affected area(s) of the facility:*
 - a. *no waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and*
 - b. *all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.*

The Emergency coordinator will ensure that no waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

9. *The owner or operator must notify the Office of Environmental Compliance, Surveillance Division and appropriate state and local authorities that the facility is in compliance with LAC 33:V.1513.F.8 before operations are resumed in the affected area(s) of the facility.*

The appropriate notifications are described above and in the Contingency Plan will be made prior to operations being resumed in the affected area(s) of the facility.

10. *The owner or operator must note in the operating record the time, date, and details of any incident that requires implementation of the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the Office of Environmental Compliance, Surveillance Division which includes:*
 - a. *name, address, and telephone number of the owner or operator;*
 - b. *name, address, and telephone number of the facility;*
 - c. *date, time, and type of incident (e.g., fire, explosion);*
 - d. *name and quantity of material(s) involved;*
 - e. *the extent of injuries, if any;*
 - f. *an assessment of actual or potential hazards to human health or the environment, where this is applicable; and*
 - g. *estimated quantity and disposition of recovered material that resulted from the incident.*

As described in the Contingency Plan, the above information, to the extent it is applicable, will be noted in the Operating Record whenever any incidents requiring implementation of the Contingency Plan occur. Items a-g above will be included in the written report (to the extent they are applicable) that will be submitted to the Office of Environmental Compliance, Surveillance Division and other appropriate authorities within 15 days of any incident requiring implementation of the Contingency Plan.

1515. Personnel Training

A. Instruction Program

1. *Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this Section. The owner or operator must ensure that this program includes all the elements described in the document required in LAC 33:V.1515.D.3.*

All personnel who handle, store, prepare, or treat reactive and listed wastes at the facility participate in an on-the-job training program. This program will include all elements described in Section 1515.D.3. All employees will be provided a copy of the training manual. As part of the program, all employees will attend a four-hour classroom session that includes review and discussion of the contents of the training manual. The training program will address the type of reactive and listed wastes processed at the facility; the applicable sections of the Resource Recovery Act and the Louisiana Administrative Code; proper procedures for handling, storing, and treating wastes; the use of emergency equipment; emergency response procedures; and first aid instruction. The outline of the training manual and descriptions of the key topics of the training program are presented in Appendix K (Part B Permit Application).

2. *This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.*

This program will be directed by a person trained in hazardous waste management procedures, and will include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed. The individual(s) responsible for training will be specifically designated in the training manual.

3. *At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including, where applicable:*

All facility personnel are instructed in the use of onsite emergency equipment, and emergency communication systems. Employees are further instructed in the use of personnel protective equipment required when handling wastes that produce toxic gases when decomposing or when being treated. The procedures, each employee's responsibilities, and interaction of onsite and offsite emergency response teams are explained.

- a. *procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;*

Existing and new employees at the facility are instructed in the use of the onsite emergency equipment. The employees will participate in annual workshops demonstrating the procedures for inspecting, repairing, and replacing this equipment. The employees will assist in maintaining the equipment to develop on-the-job experience. New employees will begin on the job training (OJT) immediately after being hired.

- b. *key parameters for automatic waste feed cut-off systems;*

Automatic waste feed cut-off systems are not used at the treatment facility; therefore this section is not applicable.

- c. *communications or alarm systems;*

All employees are instructed on the proper use of mobile radios in the vicinity of wastes and listed in Section 517.A. They are shown where all telephones are located on the facility. They are told how to notify offsite repair services for the communications systems, as appropriate. The employees are instructed on how often inspections and maintenance procedures should be performed and how to document pertinent information for each inspection, maintenance, and repair activity.

- d. *response to fires or explosions;*

Employees are trained to respond to fires and explosions using procedures described in the Contingency Plan. Employees are thoroughly familiar with this plan and will receive additional training regarding any changes to the plan.

e. response to groundwater contamination incidents; and

Employees will be trained as part of the facility training program to respond to ground water contamination incidents.

f. shutdown of operations.

Shutting down the operations at the facility during an emergency situation involves such actions as removing wastes from threatened areas, and closing storage magazines. All employees working in the operating areas will be instructed on the proper procedures to accomplish these tasks.

- 4. The facility operator shall conduct training sessions to be held at regular intervals for personnel in routine plant operation and also to inform and train the plant contingency team, representatives of local fire and police departments, and emergency response teams of plant layout, location of possible hazards, emergency equipment location and operation, the evacuation plan and route, power and waste stream cut-offs, communications equipment and phone numbers of all required contacts, and other critical information and procedures.*

All employees are required to attend employee training sessions that will be held annually at the facility. The training sessions address routine facility operations and emergency response procedures contained in the contingency plan. The training sessions may include personnel from offsite emergency response agencies (Grant Parish Sheriff Department, Colfax Fire Department, and Verda Fire Department) to maintain their familiarity with the contingency plan; facility layout; evacuation routes; onsite emergency equipment location and operation; coordination activities necessary to implement the contingency plan; the type, nature, and potential hazards associated with emergency situations involving fires and explosions at the site; the location and operation of onsite communication systems; and the phone numbers and names of the onsite emergency coordinators and contacts at the various emergency response agencies. All current revisions to the contingency plan, if any, will be reviewed with all employees and representatives from the emergency response agencies.

- B. Facility personnel must successfully complete the program required in LAC 33:V.1515.A within six months after the effective date of these regulations or six*

months after the date of their employment or assignment to a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements in LAC 33:V.1515.A.

New employees will complete the training program within six months after the date of their employment. Until they successfully complete the program, new employees will be supervised by the operator whenever they are handling wastes or working with onsite emergency equipment and systems.

C. Facility personnel must take part in an annual review of the initial training required in LAC 33:V.1515.A.

Clean Harbors Colfax, LLC will conduct an annual training refresher program to review the initial training and to review pertinent changes and events that occurred during the past year. The annual refresher program will consist of:

- **A repeat of key aspects covered in the initial training program;**
- **An update on any changes in waste stream, hazardous waste management procedures, facility design and operation, emergency equipment, communication systems, the contingency plan, and emergency response procedures;**
- **A review of maintenance and compliance procedures to identify problem areas and possible improvements;**
- **A review of changes in state and federal regulations and how such changes affect the facility; and**
- **A review and analysis of incidents that occurred at the facility if any, that warranted the use of the contingency plan or emergency action. This portion of the program focuses on the cause of the incident, evaluating the effectiveness of the steps taken, and improving procedures to more effectively respond to future emergencies.**

D. The owner or operator must maintain the following documents and records at the facility:

- 1. the job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;*

This information will be maintained in the operating record for the facility.

2. *a written job description for each position listed in LAC 33:V.1515.D.1. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications and duties of employees assigned to each position;*

All job descriptions will be maintained in each facility's training file, and this information will be considered part of the operating record for the facility.

3. *a written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed in LAC 33:V.1515.D.1; and*

Detailed information on the training requirements for each position at the facility is included in the Training Plan (Appendix K). This information will be included in the operating record for the facility.

4. *records documenting that the training or job experience required under LAC 33:V.1515.A, B, and C have been given to, and completed by, facility personnel.*

Detailed records documenting the training or job experience are maintained in each employee's training file. This information will be included in the operating record for the facility in accordance with the records maintenance requirements identified in other areas of the regulation.

- E. *Training records on current personnel must be kept until closure of the facility; training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.*

Training records will be maintained in the employee training files for the required time period and will be transferred within the company as needed.

1517. General Requirements for Ignitable, Reactive, or Incompatible Wastes

- A. *The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical,*

or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator must restrict smoking and open flame to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

The wastes that are stored and treated at the site are self-contained and usually shipped in boxes. The containers of wastes are checked to verify their contents against the shipping manifest, and are then placed in the storage magazines. Incompatible wastes are stored in separate magazines. The individual containers of waste are not opened until they are moved to the preparation building. Preparation may involve perforating, opening, or shortening some waste containers to promote thermal treatment. Diesel fuel is used in the ignition process.

The storage, preparation, and burning areas contain minimal electrical, vibratory, or metal equipment that could potentially promote accidental explosion or fires involving the wastes treated at the site.

The magazines meet the requirements for storage structures as established by the Bureau of Alcohol, Tobacco, and Firearms. No radios, electrical alarms, or other electrical equipment are located or permitted to be used within the magazine enclosures. Metal tools or equipment, such as metal fire extinguishers, are not located within the storage magazine enclosures.

The burning areas contain the open burners. Fire extinguishers are located at both entrances to the treatment area. Other electrical or metal tools are located or operated away from the open burners to eliminate the potential for unplanned events that could occur such as from sparks or radiant heat.

The preparation building consists of a concrete pad with a metal building, as shown in Appendix B (Part B Permit Application). Electrical equipment used in the preparation area is shielded. Cutting edges of tools are cooled with liquid.

Smoking, open flames (other than when burning waste), and radios (except those operated by facility personnel for communicating) are prohibited within the operating area of the facility. Warning signs stating these restrictions are posted at the entrance to the operating area. Smoking is not allowed while transferring wastes from the administrative area to the operating area within the facility.

B. The owner or operator of a facility that treats, stores, or disposes of ignitable or reactive waste, or mixes incompatible waste or incompatible wastes and other materials, must take precautions to prevent reactions which:

- 1. generate extreme heat or pressure, fire or explosions, or violent reactions;*

Potential sources that could cause an accidental fire or explosion include detonators, poor ventilation in the storage magazines, open flames in the vicinity of the wastes, and mixing incompatible wastes.

Detonators from explosive devices, wastes packed in liquids, water reactive wastes packed in non-aqueous liquids, and liquid wastes are stored in separate magazines (Maximum container size to be 55-gallon metal drums; liquid waste may also come in glass containers). The operator checks the waste manifest of each incoming shipment against the waste record for each storage magazine to ensure that incompatible wastes are not stored at the same location. The storage magazines are well ventilated to prevent extreme heat or pressures from developing within each structure.

Wastes that could yield toxic gases when burned will be burned in small quantities to minimize a threat to human health. Also, the temperature during treatment of the wastes is maintained as low as possible by burning small quantities of waste at a particular time to minimize the potential for an uncontrolled burn. A slow burning, low volatile fuel, such as diesel, is used to assist in the burning process. The burners are open and well ventilated to eliminate development of extreme heat or pressures and to minimize the potential for violent reactions. The minimization of the potential for a violent reaction during treatment is accomplished by only burning small quantities of wastes at a given time.

- 2. produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment;*

The major hazard to human health and the environment from open burning is associated with the reactive potential of the wastes, flying debris, explosion and fire. The procedures outlined in the response to 1517.B.1 above will minimize the potential for these hazards. In addition, the operating procedures of not mixing incompatible wastes also guards against toxic fume, dust, or gas production.

- 3. produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;*

Flammable fumes or gases produced during treatment are consumed during treatment since any flammable materials will be burned along with the materials being burned. Through prudent operational practices (slow open burning), the likelihood of uncontrolled flammable fumes or gases is reduced.

- 4. damage the structural integrity of the device or facility; and*

The operator has signs prohibiting smoking, open flames, and radios posted in obvious locations at the entrances to the operating area. The storage magazines and burners are well ventilated. These features of the facility are designed to reduce the potential for an uncontrolled or unplanned fire or explosion to occur that could destroy or damage facility structures.

The storage units are constructed in accordance with the requirements for magazines as set forth by the Bureau of Alcohol, Tobacco, and Firearms. The units will reduce the impact of an uncontrolled explosion on the adjacent environment. If only small amounts of reactive compounds are involved in the incident, the storage magazines may contain an explosion entirely.

The preparation building consists of a concrete slab and a metal building. The potential for a major fire or explosion to occur in this area is minimal since small amounts of reactives are prepared at any given time.

Potential damage to units in the burning area due to fire or explosion would primarily consist of cracking or destroying an open burner. For this reason, volumes of waste treated in each open burner are carefully controlled. Low volatile diesel fuel is used to assist the treatment process. Each unit is visually inspected before and after the treatment process to verify their working condition. The units are simply constructed and can be replaced in a short period of time if necessary.

5. through other like means threaten human health or the environment.

Hazards to human health and the environment associated with storage and treatment of wastes are from unplanned or uncontrolled fires or explosions. The operator has placed warning signs in appropriate areas; designed the facility to comply with the applicable federal, state, and local standards; provided large buffer zones around the operating area; developed plans for emergency response in coordination with local and state agency involvement; will visually monitor the operating area when in use; and will not permit open flames, the use of welders or similar heat and spark generating equipment, or smoking in the vicinity of the stored reactives or reactives being prepared for treatment.

C. In landfills and burial sites, incompatible wastes shall be adequately separated to avoid mixing of the wastes during operation or after closure.

The facility does not have landfill or burial cells, so LAC 33:V.1517.C does not apply.

D. Treatment and storage facilities containing ignitable, reactive, or incompatible wastes shall be sufficiently separated or protected to prevent mixing, ignition, or reaction as a result of a spill, tank failure, or other cause. Protection shall include use of container materials compatible with the wastes contained therein.

The wastes are in DOT approved containers when they are delivered to the facility. The wastes are transferred directly in their original shipping containers to the storage magazines. The types of wastes delivered are checked against what is already present in each storage magazines. Incompatible wastes, such as detonators, will be placed in separate magazines.

The storage units are built in accordance with the requirements for magazines established by the Bureau of Alcohol, Tobacco, and Firearms. Except for magazines 8, 9, and 10, the storage magazines are located no closer than 100 feet to each other, as shown on the facility plan in Appendix B (Drawing # 103).

Wastes are transported to the treatment areas using a utility vehicle and trailer. Incompatible wastes are transferred from the storage area in separate trips. The trailer will be examined after each trip to check for material that may have leaked from the previous load and could potentially cause an unexpected reaction with the subsequent load of waste. The operator will check the preparation building after each batch of waste has been prepared and moved to the burning areas. Incompatible wastes will be treated in different open burners to eliminate potential mixing or reaction.

E. Any container, including tank trucks, used to transport waste shall be cleaned before leaving the disposal site. Such cleaning should be by a method or methods necessary to remove the hazardous constituents to a level which will not cause an incompatibility with any subsequent shipment and/or of itself render any future load hazardous. All material resulting from such cleaning shall be considered a hazardous waste unless otherwise approved by the administrative authority.

The facility uses a trailer attached to a utility vehicle to transport wastes within the operating area of the facility. After each load, the trailer will be inspected to determine if waste has leaked from the containers onto the trailer bed. Any leaked waste will be collected in metal or glass containers, and will be treated and disposed by burning. If necessary, water will be used to cleanup any remaining waste on the trailer bed. Water used in this cleanup will be collected in containers and disposed by burning. These procedures will reduce the presence of such material on the trailer to a level that minimizes potential reaction of a subsequent load of incompatible waste.

In addition, containers that are used to store listed hazardous waste residue will be inspected weekly at a minimum.

F. When required to comply with LAC 33:V.1517.A and B, the owner or operator must document that compliance. This documentation may be based on references to published scientific or engineering literature, data from trial tests (e.g., bench scale or pilot scale tests), waste analyses, or the results of the treatment of similar wastes by similar treatment processes and under similar operating conditions.

The operator has designed the treatment facility to meet the applicable requirements of local, state, and federal agencies and regulations concerned with storing and treating wastes. These agencies include the Bureau of Alcohol, Tobacco, and Firearms, the LDEQ, and the LDPS.

The type of storage units, open burners, and other equipment utilized for site operations and operating procedures, including emergency response plans, is presented in more detail in Sections 517.T.7 and 1513 of this permit application. These sections also contain supporting documentation, where appropriate, to justify the different aspects of the facility design. The operating procedures and plans presented in this permit application will promote operation of the facility in a safe manner that minimizes potential hazards to human health and the environment associated with storing and treating the wastes. Approval of this permit application by the administrative authority will notify the operator that these plans and procedures comply with the applicable regulations.

The operator will maintain profiles at the facility office to verify the nature and type of waste delivered to the facility for storage and treatment. The profile will be referenced on the incoming waste records. The movement of waste onsite will be recorded, including the type and quantity of waste, previous and new locations onsite, and date and time of treatment or onsite transfer. The shipment manifests, onsite waste movement records, waste analysis, and other required records will be part of the operating record for the facility.

1519. General Waste Analysis

A. Hazardous Waste Chemical and Physical Analysis

- 1. Before an owner or operator treats, stores, or disposes of any hazardous waste, or non-hazardous wastes if applicable under LAC 33:V.3513.D, he or she must obtain a detailed chemical and physical analysis of a representative sample of the waste. At a minimum, this analysis must contain all the information which must be known to treat, store, or dispose of the waste in accordance with all requirements of LAC 33:V.Chapters 15 and 22.*

The Waste Analysis Plan (WAP) requires that the generators will supply profiles of the waste detailing all information that must be known to store and treat the waste in accordance with all requirements of LAC 33:V.Chapters 15 and 22.

2. *The analysis may include data developed under LAC 33:V.Chapter 49 and existing published or documented data on the hazardous waste or on hazardous waste generated from similar processes.*

[Comment: For example, the facility's records of analyses performed on the waste before the effective date of these regulations, or studies conducted on hazardous waste generated from processes similar to that which generated the waste to be managed at the facility, may be included in the data base required to comply with Paragraph A.1 of this Section. The owner or operator of an off-site facility may arrange for the generator of the hazardous waste to supply part of the information required by Paragraph A.1 of this Section, except as otherwise specified in LAC 33:V.2247.A and A.1. If the generator does not supply the information and the owner or operator chooses to accept a hazardous waste, the owner or operator is responsible for obtaining the information required to comply with this Section.]

As noted in the WAP, analyses of incoming waste will be based on existing published or documented data.

3. *The analysis must be repeated as necessary to ensure that it is accurate and up to date. At a minimum, the analysis must be repeated:*
 - a. *when the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste or nonhazardous waste if applicable under LAC 33:V.3513.D, has changed; and*

As noted in the WAP, the facility will review the analyses if it believes or is notified that the waste has changed. As a minimum, the facility will require annual updates of profiles from generators.

- b. *for off-site facilities, when the results of the inspection required in LAC 33:V.1519.A.4 indicate that the hazardous waste received at the facility does not match the waste designated in the accompanying manifest or shipping paper.*

As noted in the WAP, the facility will verify that the waste received matches the waste manifested and the description of the wastes from existing profiles. If discrepancies are noted, additional data will be obtained.

4. *The owner or operator of an off-site facility must inspect and, if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper.*

Facility personnel will inspect the waste received to verify its identity compared to the waste profile and the manifest. The facility will not analyze incoming waste due to safety concerns. Each incoming waste shipment is weighed.

- B. The owner or operator must develop and follow a written waste analysis plan that describes the procedures that he or she will carry out to comply with LAC 33:V.1519.A. He or she must keep this plan at the facility. At a minimum, the plan must specify:*

The Waste Analysis Plan required by this section is in Appendix G (Part B Permit Application.

- 1. the parameters for which each hazardous waste, or non-hazardous waste if applicable under LAC 33:V.3513.D, will be analyzed and the rationale for the selection of these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with LAC 33:V.1519.A);*

Incoming waste is not analyzed due to its reactive nature. Analytical data are obtained from references maintained on site and profiles provided by the generator. Outgoing waste consists of ash residue from thermal treatment of the wastes. Section 3.1 of the WAP describes the analyses to be conducted on ash from treatment of characteristic waste. Section 3.2 of the WAP describes the analyses to be conducted on ash from the treatment of listed waste. The rationale for the parameters analyzed is presented in the WAP.

- 2. the test methods as specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 as incorporated by reference at LAC 33:V.110, or an equivalent method approved by the administrative authority, which will be used to test for these parameters; and*

SW-846 method numbers for analysis of outgoing waste are contained in the WAP.

- 3. the sampling method which will be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using a method approved by the administrative authority;*

[Comment: See LAC 33:V.105.I for related discussion.]

Incoming waste is not sampled. The WAP describes the sampling method for ash from a characteristic waste; the WAP describes the sampling method for ash from a listed waste.

4. *the plan must further specify the frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date;*

Incoming waste is not analyzed. The WAP specifies the frequency for analysis of the outgoing ash from characteristic and listed wastes.

5. *the Quality Assurance and Quality Control (QA/QC) procedures used to ensure the waste sampling and analysis are satisfactory;*

Incoming waste is not sampled or analyzed. The WAP lists QA/QC procedures for the ash.

6. *the plan must further specify for off-site facilities the waste analyses that hazardous waste generators have agreed to supply; and*

As noted in the Waste Analysis Plan, each generator supplies the facility with a profile of the waste they will submit. These profiles are re-certified by the generator no less than annually (for continuing waste shipments under the same profile).

7. *where applicable, the methods which will be used to meet the additional waste analysis requirements for specific waste management methods as specified in LAC 33:V.1517, 1711.D, 1741.D, 1753, 2515, 3107, and 2245;*

Of the regulations cited, only LAC 33:V.1517 and 2245 apply to the operations conducted at the facility. The procedures specified in the WAP will ensure that all specific waste management methods are met.

8. *for surface impoundments exempted from land disposal prohibitions under LAC 33:V.2237, the procedures and schedules for:*
 - a. *the sampling of impoundment contents;*
 - b. *the analysis of test data; and*
 - c. *the annual removal of residues which are not delisted under LAC 33:V.105.M or which exhibit a characteristic of hazardous waste and either:*

- i. do not meet applicable treatment standards of LAC 33:V.Chapter 22.Subchapters A and B; or*
- ii. where no treatment standards have been established;*
 - (a). such residues are prohibited from land disposal under LAC 33:V.2213; or*
 - (b). such residues are prohibited from land disposal under LAC 33:V.2215; and*

There are no surface impoundments at the Clean Harbors Colfax, LLC facility; therefore, this section does not apply.

- 9. for owners and operators seeking an exemption to the air emission standards of LAC 33:V.Chapter 17. Subchapter C in accordance with LAC 33:V.1751:*
 - a. if direct measurement is used for the waste determination, the procedures and schedules for waste sampling and analysis, and the results of the analysis of test data to verify the exemption; or*
 - b. if knowledge of the waste is used for the waste determination, any information prepared by the facility owner or operator or by the generator of the hazardous waste, if the waste is received from off-site, that is used as the basis for knowledge of the waste.*

All such information (waste profiles) is maintained in the Operating Record and is available upon request by the Department. To include data related to every waste stream ever received at the facility in this application would cause the application to become unnecessarily voluminous and would be of little practical use since there is a very discrete set of waste materials that are treated at the facility. None of the wastes, based on knowledge of the materials, would be expected to contain VOC's at levels greater than 500 ppm.

- C. For off-site facilities, the required waste analysis plan must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:*

The waste analysis plan describes the handling of the incoming waste. This handling includes verification of the waste identity with the manifest and with existing waste profiles.

- 1. the procedures which will be used to determine the identity of each movement of waste managed at the facility; and*

The WAP describes the procedures to identify each movement of waste managed at the facility.

2. *the sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling; (LAC 33:V.517.C requires that the waste analysis plan be submitted with Part II of the permit application.)*

Due to safety concerns, the identification method for incoming wastes or wastes stored and treated at the facility does not include sampling and testing. Visual identification is used when moving wastes within the facility boundaries.

Sampling procedures for wastes to be shipped off site are described in the WAP.

3. *the procedures that the owner or operator of an off-site landfill receiving containerized hazardous waste will use to determine whether a hazardous waste generator or treater has added a biodegradable sorbent to the waste in the container.*

There is no landfill at the facility; therefore, this section is not applicable.

D. Certification. All waste analysis plans must be certified by a Louisiana licensed professional engineer (PE).

The Waste Analysis Plan has been certified by a Louisiana licensed professional engineer.

1521. Chemical, Physical, and Biological Treatment Facilities (Wastes Only)

In addition to the requirements listed below, a permit application shall address the technical requirements in LAC 33:V.Chapters 15, 19, 21, 29, 33, 35, and 37.

- A. *Below-surface basins are governed by LAC 33:V.2903.A.*
- B. *Above-ground and mixing and other facilities in basins shall be certified by the designing engineer or manufacturer.*
- C. *Treatment techniques shall include proper chemical analysis or data collecting such as is necessary to determine compatibility with existing treatment facilities, prevention of the release of toxic gases, and provisions for bacterial control and for safety of operating personnel.*

- D. Pilot or bench-scale tests or reliable operating data must be obtained for any new or altered hazardous waste prior to introduction into an existing or new treatment sequence.*
- E. Storage and handling procedures insuring protection of human health and the environment must be observed for all treatment chemicals or reagents.*
- F. Proper design and operation of all equipment must be maintained to insure minimum spillage, foaming, or misting.*
- G. Reserve emergency storage must be maintained for critical process areas to insure against operational mishaps and inadvertent volumetric surges.*
- H. Flow safeguards and cut-offs must be included in the flow system to avoid improper operation, overflow, or treatment defects.*
- I. Residual sludges or by-products shall be analyzed before disposition within the treatment sequence.*
- J. An air monitoring system is required under LAC 33:V.3305.E.*

This facility does not employ chemical, physical, or biological treatment; therefore, this section is not applicable.

1523. Surveillance and Monitoring

- A. Primary responsibility for the proper handling of hazardous wastes is assumed by the industry operating under these rules and regulations and cooperating with the department in meeting the purposes of the Act. As part of this responsibility, the owner or operator of any treatment, storage, or disposal facility shall develop a schedule of routine facility inspections and shall keep a log or record of all inspections carried out thereunder. The owner or operator shall likewise develop and adhere to a waste analysis plan to be approved by the department.*

The inspection schedule developed for the facility is presented in Appendix H. The inspection schedule was developed in accordance with LAC 33:V.1509. The inspection schedule includes a listing of each equipment item to be inspected, a description of the purpose for inspection, equipment maintenance requirements, and the required inspection frequency. As part of the routine inspection procedures, a record is maintained of all inspections. The record includes the date, time, purpose, and results of the inspection; a description of the required maintenance or repair, if needed; and action taken or to be taken to correct any malfunction or repairable deterioration identified during the inspection. The inspection record is entered into the operating record for the facility.

The WAP is contained in Appendix G of this application. This plan complies with the requirements of LAC 33:V.1519.A. The compositions of the wastes are known at the time of manufacture. Analyses for each type of waste treated at the site is usually

obtained from the generator. Facility personnel will check the manifest for each shipment against the actual contents of the waste loads delivered to this facility.

B. Department surveillance and monitoring includes the following:

- 1. analysis of manifests and manifest reports to determine that all wastes generated are disposed of in permitted sites and that the proper disposal method has been used;*
- 2. periodic inspections required by the permit maintenance program to insure that facilities treating, storing, and disposing of hazardous wastes are operated in conformity with the terms of the permit and these rules and regulations;*
- 3. spot inspections and sampling by the traveling laboratory and the analytical and inspection team;*
- 4. a systematic program to conduct or to require investigations and recording of the groundwater, leachate, and air monitoring systems;*
- 5. response to citizen complaints and suggestions concerning operation of the system; and*
- 6. such other procedures as may be deemed necessary by the administrative authority.*

Clean Harbors Colfax, LLC acknowledges the administrative authority's privilege to conduct the foregoing activities.

C. Violations discovered through such surveillance and monitoring shall be the subject of enforcement actions pursuant to LAC 33:V.107 of these regulations.

Clean Harbors Colfax, LLC acknowledges the administrative authority's ability to initiate enforcement actions pursuant to LAC 33:V.107 of the regulations.

1525. Emergency Response

- A. Purpose. To provide for control and clean-up of accidental spills and other emergency situations involving hazardous wastes resulting from a violation of a requirement of these regulations or the Act.*
- B. Program. The department, working with the Department of Public Safety, will establish the following program:*
 - 1. emergency response equipment and teams located in strategic locations;*
 - 2. emergency response plan involving a communication system, cooperation with local police and fire departments, training program based, as a minimum, on the*

"emergency information card," and an operations plan for each class of emergency situation; and

3. *the Emergency Response Program will respond to all in-transit accidents and spills, and respond to on-site emergencies when called by the operator or in accordance with provisions of LAC 33:V.1513.F.*

Clean Harbors Colfax, LLC acknowledges that the LDEQ has established an emergency response program and agree to cooperate in its execution, to the extent reasonable and prudent.

1527. Receiving and Monitoring Incoming Waste

- A. *Each site which treats, stores, or disposes of hazardous wastes generated off site shall be equipped to accomplish the following:*
 1. *provide control of all incoming waste to prevent entry of unrecorded and unanalyzed hazardous waste; and*

Entry to the site is from the main access road from LA Highway 471. The site boundary that fronts on the highway is fenced with a six-foot high wire fence with a six-foot high gate across the access road. A second wire fence, six-foot in height, separates the office area from the operating area of the facility. The access road at this location is also equipped with a six-foot high gate. The storage magazines, burners, and preparation building are located behind this six-foot high chain-link fence topped with barbed wire. All gates and storage buildings are equipped with locks. These features to control unauthorized entry into the facility are described in Section 1507 of this permit application. These measures are designed to prevent unauthorized entry.

All transporters delivering wastes to the facility will be required to provide a manifest from the generator for each load. All loads of wastes will be checked against the manifests. Wastes that do not meet the criteria for treatment by open burning will be rejected. The operator will acknowledge acceptance of the waste by signing the manifest form as described in Chapter 9 of this permit application. The operator will also note the onsite disposition of the received waste in the daily operating report for facility activities as required in Section 517.T.7.

2. *measure quantity and type by taking and analyzing a representative sample of waste received to verify the information on the manifest, and to determine proper method for handling and disposal.*

The wastes are containerized. They cannot be opened to obtain a representative sample of the contents when they are delivered to the site. These wastes are labeled to facilitate identification of the type. Analyses of the contents of each reactive

compound are contained in profiles which are retained at the facility office and will be used to verify that the type of waste delivered can be accepted at the site.

The quantity of the wastes for each type in each load will be determined by counting or weighing the number of containers and checking it against the amount recorded on the manifest. The weight for each type of waste is documented in the unloading report.

The wastes will be handled according to the guidelines of the ATF: Explosives Law and Regulations, published by the Bureau of Alcohol, Tobacco, and Firearms, the EPA, and the Louisiana Administrative Code.

B. Each facility within the site which receives hazardous wastes shall be equipped with necessary devices to record quantities, by classification or other identification, of hazardous wastes deposited into the facility system.

The facility will keep copies of the manifests in the operating record as described in Chapter 9 and Section 1529 of the application. Also noted in the operating record will be the disposition of the wastes by manifest document number, type, quantity, and onsite location after they are accepted at the facility.

C. Each site shall be equipped with a central control and recordkeeping system which tabulates information from LAC 33:V.1527.A.2 and B.

The records for incoming wastes will note the manifest document number, type, quantity, the onsite locations of each load of wastes, and the corresponding waste profiles as described in Section 1527.A.2, above. These records will be tabulated at the facility office.

D. Onsite Transfer Systems

1. All docking, mooring, loading, and unloading facilities for a hazardous waste treatment, storage, or disposal facility are considered part of the facility operation.

Absence of a navigable water body on site precludes any docking and mooring. The facility acknowledges that all loading and unloading operations are considered part of the facility.

2. Hose couplings for truck, barge, or pipeline discharge shall be located within a natural or created containment, with an elevation above surface elevation

sufficient to contain a 10-minute discharge. Groundwater protection shall be provided.

All waste received is containerized. No hose couplings are used. Therefore, this section does not apply.

3. *Hose couplings on a barge shall be in a containment area on the barge to prevent leakage from entering the waterway.*
4. *Hoses from a barge to the facility shall be supported by a land-based boom so that the low point of the hose is within the barge or site containment area.*
5. *Barge moorings shall be in a slack water area outside the navigation channel.*

The site does not have barge access; this section does not apply.

E. Receiving Waste from an Offsite Source. The owner or operator of a facility that receives hazardous waste from an off site source (except where the owner or operator is also the generator) must inform the generator in writing that he has the appropriate permit(s) for, and will accept, the waste the generator is shipping. The owner or operator must keep a copy of this written notice as part of the operating record.

All generators that ship wastes to the facility will be notified that the facility has obtained the appropriate permits to accept such wastes. The notifications will be given in writing. Copies of the notifications will be entered in the operating record and will be maintained at the facility office.

F. Unmanifested Waste Reports. Any wastes presented for disposal that are not accompanied by a properly completed manifest shall be rejected. The TSD operator shall note the name of the driver, hauler, and the vehicle identification numbers. He shall notify the Office of Environmental Compliance, Surveillance Division by phone immediately and in writing within seven days of the refusal to accept the waste and provide the administrative authority with the required information.

The facility acknowledges this regulation and will comply with it to the extent that it applies in lieu of LAC 33:V.909.

1529. Operating Record and Reporting Requirements

A. The owner or operator must keep a written operating record at his facility.

Clean Harbors Colfax, LLC maintains an onsite record of all operating activities at the facility. This record includes the source, type, quantity, and onsite disposition of incoming wastes, waste treatment activities, treatment residue volume and offsite disposition, training activities, incident reports, and inspection and maintenance activities.

B. Records of each hazardous waste received, treated, stored, or disposed of at the facility must be recorded in the following manner, as they become available, and maintained in the operating record until closure of the facility.

1. A description by its common name and the EPA hazardous waste number(s) (LAC 33:V.Chapter 49) which apply to the waste and the quantity of the waste received. The waste description also must include the waste's physical form, i.e., liquid, sludge, solid, or contained gas. If the waste is not listed in LAC 33:V.Chapter 49, the description also must include the process that produced it.

The record of each type of waste received, stored, and treated includes the common name of the waste, the EPA designation, the quantity of waste, and action taken with respect to the waste (i.e., received, stored, or treated). Records for incoming waste will contain the EPA identification number and a description of the waste's physical form.

2. Each hazardous waste listed in LAC 33:V.109, and each hazardous waste characteristic defined in LAC 33:V.105.B has a four-digit EPA hazardous waste number assigned to it. This number must be used for recordkeeping and reporting purposes. Where a hazardous waste contains more than one listed hazardous waste, or where more than one hazardous waste characteristic applies to the waste, the waste description must include all applicable EPA hazardous waste numbers.

The EPA four-digit hazardous waste number will be used for recordkeeping and reporting purposes. Where a hazardous waste contains more than one listed hazardous waste, or where more than one hazardous waste characteristic applies to the waste, the waste description will include all applicable EPA hazardous waste numbers.

3. Record the estimated or manifest-reported weight, or volume and density, where applicable, in one of the units of measure specified in Table 1.

Table 1. Units For Reporting	
Units of Measure	Code¹

Table 1. Units For Reporting	
Units of Measure	Code¹
Gallons	G
Gallons per hour	E
Gallons per Day	U
Liters	L
Liters per Hour	H
Liters per Day	V
Short Tons per Hour	D
Metric Tons per Hour	W
Short Tons per Day	N
Metric Tons per Day	S
Pounds per Hour	J
Kilograms per Hour	R
Cubic Yards	Y
Cubic Meters	C
Acres	B
Acre-feet	A
Hectares	Q
Hectare-meter	F
Btu's per Hour	I
¹ Single digit symbols are used here for data processing purposes.	

The weight of the wastes accepted, stored, and treated will be noted in the waste activity portion of the operating record. The reactive wastes received consist of small quantities usually much smaller than a ton. The table above does not have an abbreviation for pounds. The facility proposes to normally report in pounds and to use the symbol "P" for pounds since "P" is not otherwise used. Use of tons instead of pounds would require small fractions of a ton to be noted, with possible confusion.

4. The method(s) (by handling code(s) as specified in Table 2) and date(s) of treatment, storage, or disposal

Table 2. Handling Codes for Treatment, Storage, and Disposal Methods

Enter the handling code(s) listed below that most closely represents the technique(s) used at the facility to treat, store, or dispose of each quantity of hazardous waste received.

Storage

S01 Container (barrel, drum, etc.)

S02 Tank

S03 Waste Pile

S04 Surface Impoundment

S05 Drip Pad

S06 Containment Building (Storage)

S99 Other Storage (specify)

Treatment

Thermal Treatment

T06 Liquid injection incinerator

T07 Rotary kiln incinerator

T08 Fluidized bed incinerator

T09 Multiple hearth incinerator

T10 Infrared furnace incinerator

T11 Molten salt destructor

T12 Pyrolysis

T13 Wet air oxidation

T14 Calcination

T15 Microwave discharge

T18 Other (specify)

Chemical Treatment

T19 Absorption mound

T20 Absorption field

T21 Chemical fixation

T22 Chemical oxidation

T23 Chemical precipitation

T24 Chemical reduction

T25 Chlorination

T26 Chlorinolysis

T27 Cyanide destruction

T28 Degradation

Table 2. Handling Codes for Treatment, Storage, and Disposal Methods
<i>T29 Detoxification</i>
<i>T30 Ion exchange</i>
<i>T31 Neutralization</i>
<i>T32 Ozonation</i>
<i>T33 Photolysis</i>
<i>T34 Other (specify)</i>
Physical Treatment
Separation of Components:
<i>T35 Centrifugation</i>
<i>T36 Clarification</i>
<i>T37 Coagulation</i>
<i>T38 Decanting</i>
<i>T39 Encapsulation</i>
<i>T40 Filtration</i>
<i>T41 Flocculation</i>
<i>T42 Flotation</i>
<i>T43 Foaming</i>
<i>T44 Sedimentation</i>
<i>T45 Thickening</i>
<i>T46 Ultrafiltration</i>
<i>T47 Other (specify)</i>
Removal of Specific Components:
<i>T48 Absorption-molecular sieve</i>
<i>T49 Activated carbon</i>
<i>T50 Blending</i>
<i>T51 Catalysis</i>
<i>T52 Crystallization</i>
<i>T53 Dialysis</i>
<i>T54 Distillation</i>
<i>T55 Electrodialysis</i>
<i>T56 Electrolysis</i>
<i>T57 Evaporation</i>
<i>T58 High gradient magnetic separation</i>
<i>T59 Leaching</i>
<i>T60 Liquid ion exchange</i>

Table 2. Handling Codes for Treatment, Storage, and Disposal Methods
T61 <i>Liquid-liquid extraction</i>
T62 <i>Reverse osmosis</i>
T63 <i>Solvent recovery</i>
T64 <i>Stripping</i>
T65 <i>Sand filter</i>
T66 <i>Other (specify)</i>
Biological Treatment
T67 <i>Activated sludge</i>
T68 <i>Aerobic lagoon</i>
T69 <i>Aerobic tank</i>
T70 <i>Anaerobic tank</i>
T71 <i>Composting</i>
T72 <i>Septic tank</i>
T73 <i>Spray irrigation</i>
T74 <i>Thickening filter</i>
T75 <i>Tricking filter</i>
T76 <i>Waste stabilization pond</i>
T77 <i>Other (specify)</i>
T78 <i>[Reserved]</i>
T79 <i>[Reserved]</i>
Boilers and Industrial Furnaces
T80 <i>Boiler</i>
T81 <i>Cement Kiln</i>
T82 <i>Lime Kiln</i>
T83 <i>Aggregate Kiln</i>
T84 <i>Phosphate Kiln</i>
T85 <i>Coke Oven</i>
T86 <i>Blast Furnace</i>
T87 <i>Smelting, Melting, or Refining Furnace</i>
T88 <i>Titanium Dioxide Chloride Process Oxidation Reactor</i>
T89 <i>Methane Reforming Furnace</i>
T90 <i>Pulping Liquor Recovery Furnace</i>
T91 <i>Combustion Device Used in the Recovery of Sulfur Values from Spent Sulfuric Acid</i>

Table 2. Handling Codes for Treatment, Storage, and Disposal Methods
T92 Halogen Acid Furnaces
T93 Other Industrial Furnaces Listed in LAC 33:V.109 (specify)
Other Treatment
T94 Containment Building (Treatment)
Disposal
D79 Underground Injection
D80 Landfill
D81 Land Treatment
D82 Ocean Disposal
D83 Surface Impoundment (to be closed as a landfill)
D99 Other Disposal (specify)
Miscellaneous (Chapter 32)
X01 Open Burning/Open Detonation
X02 Mechanical Processing
X03 Thermal Unit
X04 Geologic Repository
X99 Other Chapter 32 (specify)

The method of storage and treatment of all incoming waste will be documented in the operating record by handling code, as shown on Table 2 above, and date.

5. *The location of each hazardous waste within the facility and the quantity at each location. For disposal facilities, the location and quantity of each hazardous waste must be recorded on a map or diagram of each cell or disposal area. For all facilities, this information must include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest.*

Within the operating record, the location of each hazardous waste and the quantity of waste at each location will be documented. This information will include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest. No disposal occurs at the facility.

6. *Records and results of waste analyses and waste determinations performed as specified in these regulations and in LAC 33:V.1517, 1519, 1711, 1741, 1753, 2237.A, 2245, 2515, and 3107.*

Waste analyses will not be performed for the wastes accepted, stored, and treated at the facility. Profiles of these wastes are generally available from the generator or other reputable sources. These profiles will be maintained onsite during the operational life of the facility. The portion of the operating report for waste will reference the appropriate profiles.

Waste analyses will be maintained in the operating record for ash shipped off site.

7. *Summary reports and details of all incidents that require implementing the contingency plan.*

In accordance with Section 1513.F.10 and LAC 33:V.1513, a report will be completed for each incident where the contingency plan is implemented. The information contained in the report will include:

- EPA identification number
- name, address, and telephone number of the owner or operator;
- name, address, and telephone number of the facility;
- date, time, and type of incident (i.e., fire or explosion);
- name and quantity of material(s) involved;
- the extent of injuries, if any;
- an assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- estimated quantity and disposition of recovered material that resulted from the incident.

The incident report will become a part of the operating record of the facility.

8. *Records and results of inspections required by LAC 33:V.1509.D.*

The information required in LAC 33:V.1509.D will be entered into the operating record. The inspection report will include:

- **EPA identification number**
- **name, address, and telephone number of the owner or operator;**
- **name, address, and telephone number of the facility;**
- **date, time, and a description of the equipment inspected;**
- **the date of the previous inspection;**
- **the purpose(s) for the inspection;**
- **the findings of the inspection; and**
- **action taken at the time of the inspection or future actions to be taken to correct identified malfunctions or deteriorations, if any.**

9. *Monitoring, testing, or analytical data, and corrective action where required by LAC 33:V.1504, 1711.C-F, 1713, 1741.D-I, 1743,1751-1767, 1903, 1907, 1911, 2304, 2306, 2309, 2504, 2507, 2508, 2509, 2709, 2711, 2719, 2904, 2906, 2907, 3119, 3203, 3205, and Chapter 33, as well as corrective action cites.*

Monitoring, testing, or analytical data will be maintained as required.

10. *For off-site facilities, notices to generators that the TSD facility has the appropriate permits for and will accept the waste the generator is shipping.*

All generators delivering wastes to the facility will be notified that Clean Harbors Colfax, LLC has obtained the proper permits to treat these wastes. The notice will also state that the waste will be accepted at the facility for storage and treatment. A copy of these notices will be entered into the operating record at the time they are issued.

11. *All closure cost estimates and, for disposal facilities, all post-closure cost estimates.*

The estimated closure costs are tabulated and detailed in the Closure Plan (Appendix L). The activities required for each phase of closure and their estimated costs will be entered into the operating record of the facility. The activities and actual costs at the time of closure will also be entered. This information will be

retained onsite until complete closure of the facility submitted to the administrative authority and local land authority upon closure of the facility.

12. Records of the quantities (and date of placement) for each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal prohibition granted in accordance with LAC 33:V.2239, a petition approved in accordance with LAC 33:V.2241 or 2271, a determination made under LAC 33:V.2273, or a certification under LAC 33:V.2235 and the applicable notice required by a generator under LAC 33:V.2245.

No land disposal occurs at the facility; therefore, this section is not applicable.

13. For an off-site treatment facility, a copy of the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator under LAC 33:V.2235, 2245, or 2247.

Copies of notices, certifications, or demonstrations required under LAC 33:V.2235, 2245, or 2247 will be maintained, as applicable.

14. For an on-site treatment facility, the information contained in the notice (except the manifest number), and the certification and demonstration, if applicable, required of the generator or the owner or operator under LAC 33:V.2235, 2245, or 2247.

Clean Harbors Colfax, LLC does not treat on-site wastes that it generates; therefore, this section is not applicable.

15. For an off-site land disposal facility, a copy of the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator of a treatment facility under LAC 33:V.2235, 2245, or 2247, whichever is applicable.

Clean Harbors Colfax, LLC is not a land disposal facility; therefore, this section does not apply.

16. For an on-site land disposal facility, the information contained in the notice required of the generator or owner or operator of a treatment facility under LAC 33:V.2245 or LAC 33:V.2247, except for the manifest number, and the certification

and demonstration, if applicable, required under LAC 33:V.2235, whichever is applicable.

Clean Harbors Colfax, LLC is not a land disposal facility; therefore, this section does not apply.

17. For an off-site storage facility, a copy of the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator under LAC 33:V.2235, 2245, or 2247; and

Copies of notices, certifications, or demonstrations required under LAC 33:V.2235, 2245, or 2247 will be maintained, as applicable.

18. For an on-site storage facility, the information contained in the notice (except the manifest number), and the certification and demonstration, if applicable, required of the generator or the owner or operator under LAC 33:V.2235, 2245, or 2247.

Copies of notices, certifications, or demonstrations required under LAC 33:V.2235, 2245, or 2247 will be maintained, as applicable.

19. A certification by the permittee no less often than annually, that the permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the permittee to be economically practicable; and the proposed method of treatment, storage or disposal is that practicable method currently available to the permittee which minimizes the present and future threat to human health and the environment.

Clean Harbors Colfax, LLC will submit an annual certification that it has a program in place to reduce the volume and toxicity of hazardous waste that it generates to the degree determined to be economically practicable; and the proposed method of treatment, storage or disposal is that practicable method currently available which minimizes the present and future threat to human health and the environment.

20. Any records required under LAC 33:V.1501.H.13.

This information will be maintained to the extent that it is applicable.

C. *Availability, Retention, and Disposition of Records*

1. *All records, including plans, required under this Part must be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representatives who are duly designated by the administrative authority.*

All records, including plans required under this Part will be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representatives who are duly designated by the administrative authority. All records, including plans required under this Part will be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representatives who are duly designated by the administrative authority.

2. *The retention period for all records required under this Section is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the administrative authority.*

Clean Harbors Colfax, LLC will retain all applicable records required under this Section during the course of any unresolved enforcement action regarding the facility or as requested by the administrative authority.

3. *A copy of records of waste disposal locations and quantities must be submitted to the administrative authority and local land authority upon closure of the facility.*

No waste will be disposed at the facility; therefore, this section is not applicable. However, upon closure, the facility will provide copies of any of its operating records to the administrative authority upon request.

- D. *Annual Report. The owner or operator must prepare and submit a single copy of an annual report to the Office of Environmental Services, Environmental Assistance Division by March 1 of each year. The report form must be used for this report. The annual report must cover facility activities during the previous calendar year. Information submitted on a more frequent basis may be included by reference or in synopsis form where it is not pertinent to reporting under LAC 33:VChapter 9 or monitoring reporting under LAC 33:V.3317. It must include the following information:*

In accordance with this requirement, the facility will submit a single copy of an annual report as required above. The report will summarize the facility's activities for the previous calendar year and will be in the form required by the administrative authority.

1. the EPA identification number, name, and address of the facility;

Each report submitted will include the EPA identification number, the name, and the address of the facility.

2. the calendar year covered by the report;

The calendar year covered by the report will be included on the report.

3. for off-site facilities, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year. For imported shipments, the report must give the name and address of the foreign generator;

The EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year will be included on the report. If the facility receives any wastes from one or more foreign generators of hazardous waste, the name and address of each foreign generator will be included on the report.

4. a description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information must be listed by EPA identification number of each generator;

The annual report will include a description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information will be listed by EPA identification number of each generator (as applicable).

5. the method of treatment, storage, or disposal for each hazardous waste;

The annual report will include the method of treatment, storage, or disposal of each hazardous waste managed at the facility during the reporting period.

6. *the most recent closure cost estimate under LAC 33:V.3705, and, for disposal facilities, the most recent post-closure cost estimate under LAC 33:V.3709;*

The annual report will include the most recent closure estimate under LAC 33:V.3705. Since the facility is not a disposal facility, a post-closure cost estimate is not applicable.

7. *the certification signed by the owner or operator of the facility or his authorized representative; and*

The annual report will include a certification signed by the owner or operator of the facility or his authorized representative.

8. *monitoring data where required;*

The annual report will include monitoring data, where required.

9. *for generators who treat, store, or dispose of hazardous waste on-site, a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated;*

The annual report will include a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated.

10. *for generators who treat, store, or dispose of hazardous waste on-site, a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for the years prior to 1984.*

The annual report will include a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years.

E. Additional Reports. In addition to submitting the annual reports and unmanifested waste reports described in LAC 33:V.1529.D and 909, the owner or operator must also report to the administrative authority:

1. *releases, fires, and explosions as specified in LAC 33:V.1513.F.10;*

The annual report will include information describing releases, fires, and explosions as specified in LAC 33:V.1513.F.10.

2. facility closures as specified in LAC 33:V.Chapter 35; and

The annual report will include information on any facility closures as specified in LAC 33:V.Chapter 35.

3. as otherwise required by LAC 33:V.Chapters 17, 23, 25, 27, 29, and 33.

The annual report will include any information otherwise required by LAC 33:V.Chapters 17, 23, 25, 27, 29, and 33.

1531. Required Notices

A. The owner or operator of a facility that has arranged to receive hazardous waste from a foreign source must notify the Office of Environmental Services, Environmental Assistance Division in writing at least four weeks in advance of the date the waste is expected to arrive at the facility. Notice of subsequent shipments of the same waste from the same foreign source is not required.

If the facility intends to receive hazardous waste from a foreign source, it will notify the Office of Environmental Services, Environmental Assistance Division in writing at least four weeks in advance of the date the waste is expected to arrive at the facility.

B. The owner or operator of a recovery facility that has arranged to receive hazardous waste subject to LAC 33:V.Chapter 11.Subchapter B must provide a copy of the tracking document bearing all required signatures to the notifier, to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 1200 Pennsylvania Ave, NW, Washington, DC 20460, and to the competent authorities of all other concerned countries within three working days of receipt of the shipment. The original of the signed tracking document must be maintained at the facility for at least three years.

If the facility receives hazardous waste subject to LAC 33:V.Chapter 11.Subchapter B, it will provide a copy of the tracking document bearing all

required signatures to the notifier, to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement and Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 1200 Pennsylvania Ave, NW, Washington, DC 20460, and to the competent authorities of all other concerned countries within three working days of receipt of the shipment. The original of the signed tracking document will be maintained at the facility for at least three years.

C. *The owner or operator of a facility that receives hazardous waste from an off-site source (except where the owner or operator is also the generator) must inform the generator in writing that he has the appropriate permit(s) for, and will accept, the waste the generator is shipping. The owner or operator must keep a copy of this written notice as part of the operating record.*

For each off-site hazardous waste accepted at the facility, Clean Harbors Colfax, LLC will notify each respective generator that the facility has the appropriate permits for and will accept the waste the generator is shipping. The facility will maintain copies of these notices as a part of the operating record.

D. *Before transferring ownership or operation of a facility during its operating life, or of a disposal facility during the post-closure care period, the owner or operator must notify the new owner or operator in writing of the requirements of LAC 33:V.Subpart 1.*

Before commencing any ownership transfers as described above, the facility will notify the new owner or operator in writing of the requirements of LAC 33:V.Subpart 1.

E. *An owner's or operator's failure to notify the new owner or operator of the requirements in no way relieves the new owner or operator of his obligation to comply with all applicable requirements.*

The facility recognizes that should it fail to notify a new owner or operator of the requirements that the new owner or operator will not be relieved of its obligation to comply with all applicable requirements.

1533. Relationship to Interim Status Standards

A. *A facility owner or operator who has fully complied with the requirements for interim status, as defined in Section 3005(e) of RCRA and regulations under LAC 33:V.4301, must comply with the regulations specified in LAC 33:V.Chapter 43 in lieu of the regulations in this Chapter, until final administrative disposition of his permit application is made, except as provided under LAC 33:V.Chapter 26.*

[Comment: As stated in Section 3005(a) of RCRA, after the effective date of regulations under that Section, i.e., LAC 33:V.Chapters 3, 5, and 7, the treatment, storage, or disposal of hazardous waste is prohibited except in accordance with a permit. Section 3005(e) of RCRA provides for the continued operation of an existing facility which meets certain conditions until final administrative disposition of the owner's or operator's permit application is made.]

Since the facility is already permitted, the interim status requirements do not apply.

1535. Imminent Hazard Action

A. Notwithstanding any other provisions of these regulations, enforcement actions may be brought in accordance with R.S. 30:2050.8.

The facility recognizes the administrative authority's rights under this regulation with regard to enforcement actions brought in accordance with R.S. 30:2050.8.

Chapter 33

Ground Water Protection

3301. Applicability

- A. *Except as provided in LAC 33:V.3301.C, the regulations in this Chapter apply to owners or operators of facilities that treat, store or dispose of hazardous waste. The owner or operator must satisfy the requirements identified in LAC 33:V.3301.B for all wastes (or constituents thereof) contained in solid waste management units at the facility, regardless of the time at which waste was placed in such units.*

The regulations for miscellaneous units, Chapter 32, do not specifically require groundwater monitoring. The facility has conducted an environmental assessment (Appendix U of the August 2003 Part B permit renewal application) in accordance with its current permit. This environmental assessment demonstrated that the facility meets the environmental performance standards of Section 3203. Section V.G of the Clean Harbors Colfax, LLC Facility (Facility) Resource Conservation Recovery Act (RCRA) Subpart X Renewal Permit LAD 981 055 791-RN-OP-1 (Permit) issued by the Louisiana Department of Environmental Quality (LDEQ) required implementation of a detection monitoring plan to determine if the New Burn Area (NBA) Operations are having any adverse impacts on human health and the environment. A Tier I Sampling Plan (TISP) was submitted in accordance with the requirements of Section V.G of the Permit and was subsequently approved by the LDEQ as a Class 1-1 Permit Modification on December 1, 2011. The intent of the TISP was to present a tiered monitoring approach to determine whether a release of hazardous constituents of concern (HCOCs) to the environment has occurred (Tier I), and if so, delineate the extent of the release (Tier II). As required by the TISP, quarterly sampling of surface soils around the NBA, retention pond sediment and storm water, and outfall ditch sediment was conducted in 2012. Based on the results of the 2012 sampling events and statistical analysis, several constituents of concern (COCs) were detected in the near surface soils, retention pond sediment and storm water, and outfall drainage ditch sediment (Attachment A). The detections included volatile organic compounds (VOCs), semi-volatile organic compounds (SVOC), perchlorate, explosives, and metals that were above the naturally occurring background concentrations for the Facility or Louisiana RECAP Program Soil, Groundwater and Ecological Screening Standards. In accordance with the TISP and Section V.G.1.e of the Permit, a Tier II Sampling Plan (TIISP) for investigating the surface soils and outfall drainage ditch sediment was submitted to the LDEQ on April 15, 2013 and subsequently approved by the LDEQ on June 13, 2013. The TIISP has been completed and the Tier II Final Release Delineation Report was submitted to LDEQ in October 2013. Quarterly Tier I sampling has continued since 2012 to the present with the latest being 1Q-2015. The results of this and previous quarterly sampling events are summarized in the First Quarter 2015 Tier 1 Detection Monitoring Report dated May 21, 2015 (EDMS #9784182).

In addition, the TISP and Section V.G.1.b.vi of the Permit required that if hazardous constituents are detected in samples collected from the retention pond adjacent to the NBA, the Facility shall propose a groundwater monitoring program which meets the requirements of LAC33:V. Chapter 33 and 40 CFR §264 Subpart F. These regulations require a groundwater monitoring system as follows:

“The groundwater monitoring system shall consist of necessary wells, at least one hydraulically upgradient, to monitor groundwater moving toward the facility, and all the necessary number of wells downgradient to monitor groundwater leaving the facility. The wells shall be located to intercept contamination at the earliest possible occurrence. Well locations and completion depths must be selected to assure that all probable contaminant flow-paths are monitored. The wells shall be cased, and the casings shall be adequately sealed so that contaminants cannot be introduced from the surface or from one aquifer to another within the well bore, and so that only one water bearing sand is sampled per well. The entire groundwater monitoring system must be approved by the administrative authority.”

A phased Work Plan (WP) was proposed to address the groundwater monitoring requirements of Section V.G.1.b.vi of the Permit. A *Ground Water Monitoring System Work Plan* was submitted to LDEQ on June 11, 2013. This WP is currently under review by the LDEQ.

Prior to receiving approval of this WP, the LDEQ was advised of the Facility’s plan to begin implementation of the Phase I WP during the 2Q-2013 Tier 1 Sampling Event at the Facility (June 2013). Phase I of the WP was to determine the suitability of the existing wells (MW-2, P-3, P-4, and P-5) for groundwater monitoring around the New Open Burn Pad and Retention Pond Area (NBA).

The results of Phase I of the WP was presented in the Groundwater Monitoring System Evaluation Report (GMSER) dated December 17, 2013 (EDMS #9139927). Based on the evaluation of well locations, well depths, screen intervals, surface conditions of the wells, groundwater flow direction and groundwater production and recharge, these wells should be suitable for use as monitor wells. Each will produce a representative sample from the permeable zone. The wells have been registered as monitor wells with the LDNR. Once the monitoring well system for the NBA is approved, the Facility will submit for review and approval a proposed groundwater monitoring program for the NBA. The GMSER is currently under review by the LDEQ.

The results of the subsurface soils and groundwater investigation and RECAP evaluation for the “Old Burn Area” (OBA) were reported in RECAP Report – Screening Option – Old Burn Area dated December 14, 2012 (EDMS #8643639). Based on the results of the investigation and RECAP evaluation completed after closure of the OBA, the Facility requested that No Further Action-At This Time (NFA-ATT) be granted to the OBA. The NFA-ATT request for the OBA was approved by the LDEQ in a letter dated June 28, 2013 (EDMS #8927041).

Since the currently permitted operating unit is classified as a miscellaneous unit, the requirements of LAC 33:V. 3205 and 3322 are applicable in lieu of LAC 33:V.3303-3321.

- B. *All solid waste management units must comply with the requirements in LAC 33:V.3322. A surface impoundment, waste pile, and land treatment unit or landfill that receives hazardous waste after July 26, 1982 (hereinafter referred to as a "regulated unit") must comply with the requirements of LAC 33:V.3303-LAC 33:V.3321 in lieu of LAC 33:V.3322 for purposes of detecting, characterizing and responding to releases to the uppermost aquifer. The financial responsibility requirements of LAC 33:V.3322 apply to regulated units.*

The currently permitted operating units will comply with the requirements of LAC 33:V.3322. As described in the response to LAC 33:V.3301.A. above, the Old Burn Area has been closed and in accordance with RECAP the NFA-ATT request was approved by the LDEQ in a letter dated June 28, 2013 (EDMS #8927041). There are no existing or planned surface impoundments, waste piles, land treatment units or landfills at the facility. Therefore, the requirements of LAC 33:V.3303-3321 are not applicable.

- C. *The owner or operator's regulated unit or units are not subject to regulation for releases into the uppermost aquifer under this Chapter if:*
1. *the owner or operator is exempted under LAC 33:V.1501; or*
 2. *he operates a unit which the administrative authority finds:*
 - a. *is an engineered structure;*
 - b. *does not receive or contain liquid waste or waste containing free liquids;*
 - c. *is designed and operated to exclude liquid, precipitation, and other run-on and run-off;*
 - d. *has both inner and outer layers of containment enclosing the waste;*
 - e. *has a leak detection system built into each containment layer;*
 - f. *the owner or operator will provide continuing operation and maintenance of these leak detection systems during the active life of the unit and the closure and post-closure care periods; and*
 - g. *to a reasonable degree of certainty, will not allow hazardous constituents to migrate beyond the outer containment layer prior to the end of the post-closure care period;*
 3. *the administrative authority finds, pursuant to LAC 33:V.2719.D, that the treatment zone of a land treatment unit that qualifies as a regulated unit does not contain levels of hazardous constituents that are above background levels of those constituents by an amount that is statistically significant, and if an unsaturated zone monitoring program meeting the requirements of LAC 33:V.2711 has not shown a statistically significant increase in hazardous constituents below the treatment zone during the operating life of the unit. An exemption under LAC 33:V.3301.C can only relieve an owner or operator of responsibility to meet the requirements of this Chapter during the post-closure care period; or*
 4. *the administrative authority finds that there is no potential for migration of liquid from a regulated unit to the uppermost aquifer during the active life of the regulated unit (including the closure period) and the post-closure care period specified under LAC 33:V.3521. This demonstration must be certified by a qualified geologist or geotechnical engineer. In order to provide an adequate margin of safety in the prediction of potential migration of liquid, the owner or operator must base any predictions made under LAC 33:V.3301.C on assumptions that maximize the rate of liquid migration;*

In accordance with LAC 33:V.3301.C.4, the administrative authority has not required that the facility comply with regulations for releases into the uppermost aquifer under LAC 33:V., Chapter 33.

The regulations for miscellaneous units, Chapter 32, do not specifically require groundwater monitoring. The facility has conducted an environmental assessment of the soil and groundwater (Section II of Appendix U of the August 2003 Part B permit renewal

application). As required by LAC 33:V.3301.C, the modeling assessment scenarios were based on assumptions that maximize the potential rate of liquid migration. This environmental assessment demonstrated that the facility meets the environmental performance standards of Section 3203. As described above in the response to LAC 33:V.3301.A and as required by Section V.G of the current Permit LAD 981 055 791-RN-OP-1 (Permit), the Facility has been conducting quarterly soil, sediment, and surface water sampling around the New Open Burn Pad and Retention Pond Area (NBA) in accordance with the LDEQ approved Tier 1 Sampling Plan since 2012. Quarterly Tier I sampling has continued since 2012 to the present with the latest being 1Q-2015. The results of this and previous quarterly sampling events are summarized in the First Quarter 2015 Tier 1 Detection Monitoring Report dated May 21, 2015 (EDMS #9784182).

In addition, the Facility has conducted a phased Work Plan (WP) to address the groundwater monitoring requirements of Section V.G.1.b.vi of the Permit. The results of Phase I of the WP were presented in the Groundwater Monitoring System Evaluation Report (GMSER) dated December 17, 2013 (EDMS #9139927). Based on the evaluation of well locations, well depths, screen intervals, surface conditions of the wells, groundwater flow direction and groundwater production and recharge, these wells should be suitable for use as monitor wells. Each will produce a representative sample from the permeable zone. The wells have been registered as monitor wells with the LDNR. Once the monitoring well system for the NBA is approved, the Facility will submit for review and approval a proposed groundwater monitoring program for the NBA. The GMSER is currently under review by the LDEQ.

The results of the subsurface soils and groundwater investigation and RECAP evaluation for the "Old Burn Area" (OBA) were reported in RECAP Report – Screening Option – Old Burn Area dated December 14, 2012 (EDMS #8643639). Based on the results of the investigation and RECAP evaluation completed after closure of the OBA, the Facility requested that No Further Action-At This Time (NFA-ATT) be granted to the OBA. The NFA-ATT request for the OBA was approved by the LDEQ in a letter dated June 28, 2013 (EDMS #8927041).

Since the currently permitted operating unit is classified as a miscellaneous unit, the requirements of LAC 33:V. 3205 and 3322 are applicable in lieu of LAC 33:V.3303-3321.

5. *he designs and operates a pile in compliance with LAC 33:V.2301.C.*

There are no existing or planned waste piles at the facility. Therefore, LAC 33:V.2301.C is not applicable.

D. The regulations under this Chapter apply during the active life of the regulated unit (including the closure period). After closure of the regulated unit, the regulations in this Subpart:

1. do not apply if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure;

As described in the response to LAC 33:V.3507, at closure, the facility intends to remove and/or decontaminate all waste, waste residues, contaminated containment system

components, and contaminated subsoils. This activity will eliminate any potential post-closure threats to human health and the environment as a result of the operation and closure of the facility. Therefore, the regulations of this Chapter do not apply.

2. *apply during the post-closure care period under LAC 33:V.Chapter 35, Subchapter B post-closure requirements if the owner or operator is conducting a detection monitoring program under LAC 33:V.3317;*
 3. *apply during the compliance period under LAC 33:V.3313 if the owner or operator is conducting a compliance monitoring program under LAC 33:V.3319 or a corrective action program under LAC 33:V.3321.*
- E. *Regulations in this Chapter may apply to miscellaneous units when necessary to comply with LAC 33:V.3203-3207.*

As described in responses to LAC 33:V.3203-3207, the facility has conducted an environmental assessment of the soil and groundwater (Section II of Appendix U of the August 2003 Part B permit renewal application). As required by LAC 33:V.3301.C, the modeling assessment scenarios were based on assumptions that maximize the potential rate of liquid migration. This environmental assessment demonstrated that the facility meets the environmental performance standards of Section 3203.

As described above in the response to LAC 33:V.3301.A and as required by Section V.G of the current Permit LAD 981 055 791-RN-OP-1 (Permit), the Facility has been conducting quarterly soil, sediment, and surface water sampling around the New Open Burn Pad and Retention Pond Area (NBA) in accordance with the LDEQ approved Tier 1 Sampling Plan since 2012. Quarterly Tier I sampling has continued since 2012 to the present with the latest being 1Q-2015. The results of this and previous quarterly sampling events are summarized in the First Quarter 2015 Tier 1 Detection Monitoring Report dated May 21, 2015 (EDMS #9784182).

In addition, the Facility has conducted a phased Work Plan (WP) to address the groundwater monitoring requirements of Section V.G.1.b.vi of the Permit. The results of Phase I of the WP were presented in the Groundwater Monitoring System Evaluation Report (GMSER) dated December 17, 2013 (EDMS #9139927). Based on the evaluation of well locations, well depths, screen intervals, surface conditions of the wells, groundwater flow direction and groundwater production and recharge, these wells should be suitable for use as monitor wells. Each will produce a representative sample from the permeable zone. The wells have been registered as monitor wells with the LDNR. Once the monitoring well system for the NBA is approved, the Facility will submit for review and approval a proposed groundwater monitoring program for the NBA. The GMSER is currently under review by the LDEQ.

Therefore, the regulations in this Chapter are not necessary for the permitted miscellaneous units to comply with LAC 33:V.3203-3207.

- F. *The regulations of this Chapter apply to all owners and operators subject to the requirements of LAC 33:V.305.H when the department issues either a post-closure permit or an enforceable document (as defined in LAC 33:V.305.H) at the facility. When the department issues an*

enforceable document, references in this Chapter to "in the permit" mean "in the enforceable document."

- G. The administrative authority may replace all or part of the requirements of this Chapter applying to a regulated unit with alternative requirements for groundwater monitoring and corrective action for releases to groundwater set out in the permit (or in an enforceable document as defined in LAC 33:V.305.H) where the administrative authority determines that:*
- 1. the regulated unit is situated among solid waste management units (or areas of concern), a release has occurred, and both the regulated unit and one or more solid waste management unit(s) (or areas of concern) are likely to have contributed to the release; and*
 - 2. it is not necessary to apply the groundwater monitoring and corrective action requirements of this Chapter because alternative requirements will protect human health and the environment.*

The facility does not have nor is it requesting a post-closure permit. There is no corrective action ongoing for any of the regulated units. Therefore, Subsections 3301.F-G are not applicable to the facility. However, the facility acknowledges that the administrative authority may apply these subsections if it deems necessary.

3303. Required Programs

- A. Owners and operators subject to this Chapter must conduct a monitoring and response program as follows.*
- 1. Whenever hazardous constituents under LAC 33:V.3307 from a regulated unit are detected at the compliance point under LAC 33:V.3311, the owner or operator must institute a compliance monitoring program under LAC 33:V.3319. "Detected" is defined as statistically significant evidence of contamination as described in LAC 33:V.3317.F.*
 - 2. Whenever the ground water protection standard under LAC 33:V.3305 is exceeded, the owner or operator must institute a corrective action program under LAC 33:V.3321. "Exceeded" is defined as statistically significant evidence of increased contamination as described in LAC 33:V.3319.D.*
 - 3. Whenever hazardous constituents under LAC 33:V.3307 from a regulated unit exceed concentration limits under LAC 33:V.3309 in ground water between the compliance point under LAC 33:V.3311 and the downgradient facility property boundary, the owner or operator must institute a corrective action program under LAC 33:V.3321.*
 - 4. In all other cases, the owner or operator must institute a detection monitoring program under LAC 33:V.3317.*
- B. The administrative authority will specify in the facility permit the specific elements of the monitoring and response program. The administrative authority may include one or more of the programs identified in LAC 33:V.3303.A in the facility permit as may be necessary to protect human health and the environment. The administrative authority will specify the circumstances under which each of the programs will be required. In deciding whether to require the owner or operator to be prepared to institute a particular program, the administrative authority will consider the potential adverse effects on human health and the environment that might occur before final administrative action on a permit modification application to incorporate such a program could be taken.*

- C. *In addition, all permitted facilities where pre-existing ground water contamination continues to be present shall be required to institute compliance monitoring as required in LAC 33:V.3319 of this Chapter and corrective action programs as required in LAC 33:V.3321 of this Chapter. In no case shall free phase or mobile hazardous constituents be unmitigated. Hazardous constituents shall be isolated, reduced or stabilized consistent with the application of good engineering practices and best practical technology.*
- D. *All permits for facilities with pre-existing ground water contamination shall contain a permit condition containing the concentration limits of hazardous constituents established consistent with LAC 33:V.3305, 3307, and 3309. In no case shall other than background concentration limits be listed in the initial permit. Compliance with corrective action programs required in LAC 33:V.3303, 3319, and 3321 will constitute a permitted variance. Corrective action programs shall be reviewed annually and may be based on predictive computer modeling. Alternate concentrations provided in LAC 33:V.3309.A or B may be set by permit amendment should the original concentration limits be unattainable within 36 months.*

3305. Ground Water Protection Standard

- A. *The owner or operator must comply with conditions specified in the facility permit that are designed to ensure that hazardous constituents under LAC 33:V.3307 detected (as defined in LAC 33:V.3303.A.1) in the ground water from a regulated unit do not exceed the concentration limits under LAC 33:V.3309 in the uppermost aquifer underlying the waste management area beyond the point of compliance under LAC 33:V.3311 during the compliance period under LAC 33:V.3313. The administrative authority will establish this ground water protection standard in the facility permit when hazardous constituents have been detected (as defined in LAC 33:V.3303.A.1) in the ground water.*
- B. *The ground water monitoring system shall consist of necessary wells, at least one hydraulically upgradient, to monitor ground water moving toward the facility, and all the necessary number of wells downgradient to monitor ground water leaving the facility. The wells shall be located to intercept contamination at the earliest possible occurrence. Well locations and completion depths must be selected to assure that all probable contaminant flow-paths are monitored. The wells shall be cased, and the casings shall be adequately sealed so that contaminants cannot be introduced from the surface or from one aquifer to another within the well bore, and so that only one water bearing sand is sampled per well. The entire ground water monitoring system must be approved by the administrative authority.*
- C. *The owner or operator of the facility shall develop and adhere to a ground water sampling and analysis plan, and shall immediately advise the department when significant changes in ground water quality are determined and verified.*
- D. *Leachate*
 - 1. *The leachate monitoring system shall contain a method and device to secure samples, and determine leakage at two locations in each unit where the system is required as follows:*
 - a. *at the low point inside the barrier (liner) encased in sand, or other porous material, ensuring that leachate from all contents will percolate to the low point. Provision for pumping out all leachate which gathers inside this barrier shall be made; and*
 - b. *at a low point under the barrier (liner) and encased in a porous layer over a dense (at least three feet of clay at 1×10^{-7} cm/sec) underlayment, or natural soil, to verify the integrity of the liner.*

2. *The system shall permit sampling from an accessible surface location.*
3. *An equivalent system acceptable to the administrative authority may be installed in existing facilities.*
- E. *Air. Installed, or available portable air monitoring devices shall be located at all sites involving: incineration, landfill, or treatment facilities. An installed air monitoring system (triangular grid) with continuous recording shall be installed at all commercial sites.*
- F. *Sampling. Samples shall be taken from all required monitoring systems before waste is introduced (for new sites) to provide adequate base-line data. Sampling shall be done quarterly, and complete records shall be maintained at the site for examination by the administrative authority.*

3307. Hazardous Constituents

- A. *The administrative authority will specify in the facility permit the hazardous constituents to which the ground water protection standard of LAC 33:V.3305 applies. Hazardous constituents are constituents identified in Table 1 of LAC 33:V.Chapter 31 that have been detected in ground water in the uppermost aquifer underlying a regulated unit, and that are reasonably expected to be in or derived from waste contained in a regulated unit, unless the administrative authority has excluded them under LAC 33:V.3307.B.*
- B. *The administrative authority upon sufficient demonstration by the permittee may exclude any Table 1, LAC 33:V.Chapter 31 constituents from the list of hazardous constituents specified in the facility permit if he finds that these constituents are not capable of posing a substantial present or potential hazard to human health or the environment. In deciding whether to grant an exemption, the administrative authority will consider the following:*
 1. *potential adverse effects on ground water quality, considering:*
 - a. *the physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;*
 - b. *the hydrogeological characteristics of the facility and surrounding land;*
 - c. *the quantity of ground water and the direction of ground water flow;*
 - d. *the proximity and withdrawal rates of ground water users;*
 - e. *the current and future uses of ground water in the area;*
 - f. *the existing quality of ground water including other sources of contamination, and their cumulative impact on the ground water quality;*
 - g. *the potential for health risks caused by human exposure to waste constituents;*
 - h. *the potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and*
 - i. *the persistence and permanence of the potential adverse effects; and*
 2. *potential adverse effects on hydraulically-connected surface water quality, considering:*
 - a. *the volume and physical and chemical characteristics of the waste in the regulated unit;*
 - b. *the hydrogeological characteristics of the facility and surrounding land;*
 - c. *the quantity and quality of ground water, and the direction of ground water flow;*
 - d. *the patterns of rainfall in the region;*

- e. the proximity of the regulated unit to surface waters;*
 - f. the current and future uses of surface waters and any waters in the area, and any water quality standards established for those surface waters;*
 - g. the existing quality of surface water, including other sources of contamination, and the cumulative impact on surface water quality;*
 - h. the potential for health risks caused by human exposure to waste constituents;*
 - i. the potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and*
 - j. the persistence and permanence of the potential adverse effects.*
- C. In making any determination under LAC 33:V.3307.B of this Section about the use of ground water in the area around the facility, the administrative authority will consider any identification of underground sources of drinking water and exempted aquifers.*

3309. Concentration Limits

- A. The administrative authority will specify in the facility permit concentration limits in the groundwater for hazardous constituents established under LAC 33:V.3307. The concentration of a hazardous constituent:*
- 1. must not exceed the background level of that constituent in the groundwater at the time that limit is specified in the permit; or*
 - 2. for any of the constituents listed in Table 1 of this Section, must not exceed the respective value given in that table if the background level of the constituent is below the value given; or*
 - 3. must not exceed an alternative limit established by the administrative authority under Subsection B of this Section.*

Table 1. Maximum Concentration of Constituents for Ground Water Protection

Constituent	Maximum Concentration ¹
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.01
Silver	0.05
Endrin (1,2,3,4,10,10-hexachloro-1,7-epoxy-1,4,4a,5,6,7,8,9a-octahydro-1,4-endo-5,8-demethano naphthalene)	0.0002
Lindane (1,2,3,4,5,6-hexachlorocyclohexane, gamma isomer)	0.004
Methoxychlor (1,1,1-Trichloro-2,2-bis(p-methoxyphenylethane)	0.01
Toxaphene (C ₁₀ H ₁₀ Cl ₆ , Technical chlorinated camphene, 67-69 percent chlorine)	0.005
2,4-D (2,4-Dichlorophenoxyacetic acid)	0.1
2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid)	0.01

¹ Milligrams per liter

B. The administrative authority may establish an alternate concentration limit for a hazardous constituent if he finds that the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the alternate concentration limit is not exceeded. The establishment of such alternative concentration limits shall be in accordance with LAC 33:1.Chapter 13. In establishing alternate concentration limits, the administrative authority will consider the following factors:

1. potential adverse effects on groundwater quality, considering:
 - a. the physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;
 - b. the hydrogeological characteristics of the facility and surrounding land;
 - c. the quantity of groundwater and the direction of groundwater flow;
 - d. the proximity and withdrawal rates of groundwater users;
 - e. the current and future uses of groundwater in the area;

- f. *the existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;*
 - g. *the potential for health risks caused by human exposure to waste constituents;*
 - h. *the potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;*
 - i. *the persistence and permanence of the potential adverse effects; and*
2. *potential adverse effects on hydraulically-connected surface water quality, considering:*
- a. *the volume and physical and chemical characteristics of the waste in the regulated unit;*
 - b. *the hydrogeological characteristics of the facility and surrounding land;*
 - c. *the quantity and quality of groundwater and the direction of groundwater flow;*
 - d. *the patterns of rainfall in the region;*
 - e. *the proximity of the regulated unit to surface waters;*
 - f. *the current and future uses of surface waters in the area and any water quality standards established for those surface waters;*
 - g. *the existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;*
 - h. *the potential for health risks caused by human exposure to waste constituents;*
 - i. *the potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and*
 - j. *the persistence and permanence of the potential adverse effects.*
- C. *In making any determination under Subsection B of this Section about the use of groundwater in the area around the facility, the administrative authority will consider any identification of underground sources of drinking water and exempted aquifers identified in the permit application under LAC 33:V.Chapter 3. Any identification of underground sources of drinking water shall be in accordance with LAC 33:I.Chapter 13.*

3311. Point of Compliance

- A. *The administrative authority will specify in the facility permit the point of compliance at which the ground water protection standard of LAC 33:V.3305.A applies and at which monitoring must be conducted. The point of compliance is a vertical surface located at the hydraulically downgradient limit of the waste management area or the delineated zone of contamination that extends down into the uppermost aquifer underlying the regulated units or the delineated zone of contamination.*
- B. *The waste management area is the limit projected in the horizontal plane of the area on which waste will be placed during the active life of a regulated unit.*
 - 1. *The waste management area includes horizontal space taken up by any liner, dike, or other barrier designed to contain waste in a regulated unit.*
 - 2. *If the facility contains more than one regulated unit, the waste management area is described by an imaginary line circumscribing the several regulated units.*

3313. Compliance Period

- A. The administrative authority will specify in the facility permit the compliance period during which the ground water protection standard of LAC 33:V.3305 applies. The compliance period is the number of years equal to the active life of the waste management area (including any waste management activity prior to permitting, and the closure period.)*
- B. The compliance period begins when the owner or operator initiates a compliance monitoring program meeting the requirements of LAC 33:V.3319.*
- C. If the owner or operator is engaged in a corrective action program at the end of the compliance period specified in Subsection A of this Section, the compliance period is extended until the owner or operator can demonstrate that the ground water protection standard of LAC 33:V.3305 has not been exceeded for a period of three consecutive years.*

3315. General Ground Water Monitoring Requirements

[NOTE: The owner or operator must comply with the following requirements for any ground water monitoring program developed to satisfy LAC 33:V.3317, 3319, or 3321.]

- A. The ground water monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths, to yield ground water samples from the uppermost aquifer that fulfill the following requirements.*
 - 1. The samples must represent the quality of ground water that has not been affected by leakage from a regulated unit. A determination of background quality may include sampling of wells that are not hydraulically upgradient of the waste management area where:*
 - a. hydrogeologic conditions do not allow the owner or operator to determine which wells are hydraulically upgradient; and*
 - b. sampling at other wells will provide an indication of background ground water quality that is representative or more representative than that provided by the upgradient wells.*
 - 2. The samples must represent the quality of water passing the point of compliance.*
 - 3. The samples must allow for the detection (as defined in LAC 33:V.3303.A.1) of contamination when hazardous waste or hazardous constituents have migrated from the waste management area to the uppermost aquifer.*
- B. If a facility contains more than one regulated unit, separate ground water monitoring systems are not required for each regulated unit, if provisions for sampling the ground water in the uppermost aquifer will enable detection and measurement at the compliance point for hazardous constituents for the regulated units.*
- C. All monitoring wells must be cased in a manner that maintains the integrity of the monitoring-well bore hole. This casing must be screened or perforated, and packed with gravel or sand, where necessary, to enable collection of ground water samples. The annular space (i.e., the space between the bore hole and well casing) above the sampling depth must be sealed to prevent contamination of samples and the ground water.*
- D. The ground water monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of ground water quality below the waste management area. At a minimum, the program must include procedures and techniques for:*
 - 1. sample collection;*

2. *sample preservation and shipment;*
 3. *analytical procedures; and*
 4. *chain of custody control.*
- E. *The ground water monitoring program must include sampling and analytical methods that are appropriate for ground water sampling, and that accurately measure hazardous constituents in ground water samples.*
- F. *The ground water monitoring program must include a determination of the ground water surface elevation each time ground water is sampled.*
- G. *In detection monitoring or where appropriate in compliance monitoring, data on each indicator parameter and on each hazardous constituent specified in the permit will be collected from background wells and wells at the compliance point(s). The number and kinds of samples collected to establish background shall be appropriate for the form of statistical test employed, following generally accepted statistical principles. The sample size shall be as large as necessary to ensure with reasonable confidence that a contaminant release to ground water from a facility will be detected. The owner or operator will determine an appropriate sampling procedure and interval for each hazardous constituent listed in the facility permit which shall be specified in the unit permit upon approval by the administrative authority. This sampling procedure shall be:*
1. *a sequence of at least four samples, taken at an interval that assures, to the greatest extent technically feasible, that an independent sample is obtained, by reference to the uppermost aquifer's effective porosity, hydraulic conductivity, and hydraulic gradient, and the fate and transport characteristics of the potential contaminants; or*
 2. *an alternate sampling procedure proposed by the owner or operator and approved by the administrative authority.*
- H. *The owner or operator will specify one of the following statistical methods to be used in evaluating ground water monitoring data for each indicator parameter and hazardous constituent that, upon approval by the administrative authority, will be specified in the unit permit. The statistical test chosen shall be conducted separately for each indicator parameter and hazardous constituent in each well. Where practical quantification limits (PQLs) are used in any of the following statistical procedures to comply with LAC 33:V.3315.I.5, the PQL must be proposed by the owner or operator and approved by the administrative authority. Use of any of the following statistical methods must be protective of human health and the environment and must comply with the performance standards outlined in LAC 33:V.3315.I.*
1. *A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent.*
 2. *An analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.*
 3. *A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.*
 4. *A control chart approach that gives control limits for each constituent.*

5. *Another statistical test method submitted by the owner or operator and approved by the administrative authority.*
- I. *Any statistical method chosen under LAC 33:V.3315.H for specification in the unit permit shall comply with the following performance standards, as appropriate.*
 1. *The statistical method used to evaluate ground water monitoring data shall be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data should be transformed or a distribution-free theory test should be used. If the distributions for the constituents differ, more than one statistical method may be needed.*
 2. *If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a ground water protection standard, the test shall be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the Type I experimentwise error rate for each testing period shall be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.*
 3. *If a control chart approach is used to evaluate ground water monitoring data, the specific type of control chart and its associated parameter values shall be proposed by the owner or operator and approved by the administrative authority if he or she finds it to be protective of human health and the environment.*
 4. *If a tolerance interval or a prediction interval is used to evaluate ground water monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, shall be proposed by the owner or operator and approved by the administrative authority if he or she finds these parameters to be protective of human health and the environment. These parameters will be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.*
 5. *The statistical method shall account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantification limit (PQL) approved by the administrative authority under LAC 33:V.3315.H that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.*
 6. *If necessary, the statistical method shall include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.*
- J. *Ground water monitoring data collected in accordance with LAC 33:V.3315.G including actual levels of constituents must be maintained in the facility operating record. The administrative authority will specify in the permit when the data must be submitted for review.*
- K. *The ground water monitoring program must ensure that the permittee maintains records from all required ground water monitoring wells and associated ground water surface elevations for the active life of the facility, including the operating, closure, and post-closure care periods.*

3317. Detection Monitoring Program

[NOTE: An owner or operator required to establish a detection monitoring program under this Subpart must, at a minimum, discharge the following responsibilities.]

- A. The owner or operator must monitor for indicator parameters (e.g., specific conductance, total organic carbon, or total organic halogen), waste constituents, or reaction products that provide a reliable indication of the presence of hazardous constituents in ground water. The authority will specify the parameters or constituents to be monitored in the facility permit, after considering the following factors:*
 - 1. the types, quantities, and concentrations of constituents in wastes managed at the regulated unit;*
 - 2. the mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the waste management area;*
 - 3. the detectability of indicator parameters, waste constituents, and reaction products in ground water; and*
 - 4. the concentrations or values, and coefficients of variation of proposed monitoring parameters or constituents in the ground water background.*
- B. The owner or operator must install a ground water monitoring system at the compliance point as specified under LAC 33:V.3311. The ground water monitoring system must comply with LAC 33:V.3315.A.2, B, and C.*
- C. The owner or operator must conduct a ground water monitoring program for each chemical parameter and hazardous constituent specified in the permit pursuant to LAC 33:V.3317.A in accordance with LAC 33:V.3315.G. The owner or operator must maintain a record of ground water analytical data as measured and in a form necessary for the determination of statistical significance under LAC 33:V.3315.H.*
- D. The administrative authority will specify the frequencies for collecting samples and conducting statistical tests to determine whether there is statistically significant evidence of contamination for any parameter or hazardous constituent specified in the permit under LAC 33:V.3317.A in accordance with LAC 33:V.3315.G. A sequence of at least four samples from each well (background and compliance wells) must be collected at least semi-annually during detection monitoring.*
- E. The owner or operator must use procedures and methods for sampling and analysis that meet the requirements of LAC 33:V.3315.D and E.*
- F. The owner or operator must determine whether there is statistically significant evidence of contamination for any chemical parameter or hazardous constituent specified in the permit pursuant to LAC 33:V.3317.A at a frequency specified under LAC 33:V.3317.D.*
 - 1. In determining whether statistically significant evidence of contamination exists, the owner or operator must use the method(s) specified in the permit under LAC 33:V.3315.H. These method(s) must compare data collected at the compliance point(s) to the background ground water quality data.*
 - 2. The owner or operator must determine whether there is statistically significant evidence of contamination at each monitoring well at the compliance point within a reasonable period of time after completion of sampling. The administrative authority will specify in the facility permit what period is reasonable, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground water samples.*

- G. *If the owner or operator determines pursuant to LAC 33:V.3317.F that there is statistically significant evidence of contamination for chemical parameters or hazardous constituents specified pursuant to LAC 33:V.3317.A at any monitoring well at the compliance point, he or she must do the following.*
1. *Notify the administrative authority of this finding in writing within seven days. The notification must indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination.*
 2. *Immediately sample the ground water in all monitoring wells and determine whether constituents listed in LAC 33:V.3325.Table 4 are present, and if so, in what concentrations.*
 3. *For any LAC 33:V.3325 compounds found in the analysis pursuant to LAC 33:V.3317.G.2, the owner or operator may resample within one month and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents will form the basis for compliance monitoring. If the owner or operator does not resample for the compounds found pursuant to LAC 33:V.3317.G.2, the hazardous constituents found during this initial LAC 33:V.3325.Table 4 analysis will form the basis for compliance monitoring.*
 4. *Within 90 days, submit to the Office of Environmental Services, Permits Division an application for a permit modification to establish a compliance monitoring program meeting the requirements of LAC 33:V.3319. The application must include the following information:*
 - a. *an identification of the concentration of any LAC 33:V.3325.Table 4 constituent detected in the ground water at each monitoring well at the compliance point;*
 - b. *any proposed changes to the ground water monitoring system at the facility necessary to meet the requirements of LAC 33:V.3319;*
 - c. *any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of LAC 33:V.3319;*
 - d. *for each hazardous constituent detected (as defined in LAC 33:V.3301.A.1) at the compliance point, a proposed concentration limit under LAC 33:V.3309.A.3.a or b, or a notice of intent to seek an alternate concentration limit under LAC 33:V.3309.B.*
 5. *Within 180 days, submit to the Office of Environmental Services, Permits Division:*
 - a. *all data necessary to justify an alternate concentration limit sought under LAC 33:V.3309.B; and*
 - b. *an engineering feasibility plan for a corrective action program necessary to meet the requirement of LAC 33:V.3321, unless:*
 - i. *all hazardous constituents identified under LAC 33:V.3317.G.2 are listed in Table 1 of LAC 33:V.3309, and their concentrations do not exceed the respective values given in that table; or*
 - ii. *the owner or operator has sought an alternate concentration limit under LAC 33:V.3309.B for every hazardous constituent identified under LAC 33:V.3317.G.2.*
 6. *If the owner or operator determines, pursuant to LAC 33:V.3317.F, that there is a statistically significant difference for chemical parameters or hazardous constituents specified pursuant to LAC 33:V.3317.A at any monitoring well at the compliance point, he or she may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or*

natural variation in the ground water. The owner or operator may make a demonstration under this Paragraph in addition to, or in lieu of, submitting a permit modification application under LAC 33:V.3317.G.4; however, the owner or operator is not relieved of the requirement to submit a permit modification application within the time specified in LAC 33:V.3317.G.4 unless the demonstration made under this Paragraph successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this Paragraph, the owner or operator must:

- a. notify the Office of Environmental Services, Permits Division in writing within seven days of determining statistically significant evidence of contamination at the compliance point that he or she intends to make a demonstration under this Paragraph;*
 - b. within 90 days, submit a report to the Office of Environmental Services, Permits Division that demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation;*
 - c. within 90 days, submit to the administrative authority an application for a permit modification to make any appropriate changes to the detection monitoring program facility; and*
 - d. continue to monitor in accordance with the detection monitoring program established under this Section.*
- H. If the owner or operator determines that the detection monitoring program no longer satisfies the requirements of this Section, he or she must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.*

3319. Compliance Monitoring Program

[NOTE: An owner or operator required to establish a compliance monitoring program under this Chapter must, at a minimum, discharge the following responsibilities.]

- A. The owner or operator must monitor the ground water to determine whether regulated units are in compliance with the ground water protection standard under LAC 33:V.3305. The administrative authority will specify the ground water protection standard in the facility permit, including:*
 - 1. a list of the hazardous constituents identified under LAC 33:V.3307;*
 - 2. concentration limits under LAC 33:V.3309 for each of those hazardous constituents;*
 - 3. the compliance point under LAC 33:V.3311; and*
 - 4. the compliance period under LAC 33:V.3313.*
- B. The owner or operator must install a ground water monitoring system at the compliance point as specified under LAC 33:V.3311. The ground water monitoring system must comply with LAC 33:V.3315.A.2, B, and C.*
- C. The administrative authority will specify the sampling procedures and statistical methods appropriate for the constituents and the facility, consistent with LAC 33:V.3315.G and H.*
 - 1. The owner or operator must conduct a sampling program for each chemical parameter or hazardous constituent in accordance with LAC 33:V.3315.G*

2. *The owner or operator must record ground water analytical data as measured and in the form necessary for the determination of statistical significance under LAC 33:V.3315.H for the compliance period of the facility.*
- D. *The owner or operator must determine whether there is statistically significant evidence of increased contamination for any chemical parameter or hazardous constituent specified in the permit, pursuant to LAC 33:V.3319.A at a frequency specified under LAC 33:V.3319.F.*
1. *In determining whether statistically significant evidence of increased contamination exists, the owner or operator must use the method(s) specified in the permit under LAC 33:V.3315.H. The method(s) must compare data collected at the compliance point(s) to a concentration limit developed in accordance with LAC 33:V.3309.*
 2. *The owner or operator must determine whether there is statistically significant evidence of increased contamination at each monitoring well at the compliance point within a reasonable period after completion of sampling. The administrative authority will specify that period in the facility permit, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground water samples.*
- E. *The owner or operator must determine the groundwater flow rate and direction in the uppermost aquifer at least annually.*
- F. *The administrative authority will specify the frequencies for collecting samples and conducting statistical tests to determine statistically significant evidence of increased contamination in accordance with LAC 33:V.3315.G. A sequence of at least four samples from each well (background and compliance wells) must be collected at least semi-annually during the compliance period of the facility.*
- G. *The owner or operator must analyze samples from all monitoring wells at the compliance point for all constituents listed in LAC 33:V.3325.Table 4 at least annually to determine whether additional hazardous constituents are present in the uppermost aquifer and, if so, at what concentration, pursuant to procedures in LAC 33:V.3317.F. If the owner or operator finds LAC 33:V.3325.Table 4 constituents in the groundwater that are not already identified in the permit as monitoring constituents, the owner or operator may resample within one month and repeat the LAC 33:V.3325.Table 4 analysis. If the second analysis confirms the presence of new constituents, the owner or operator must report the concentrations of these additional constituents to the administrative authority within seven days after the completion of the second analysis and add them to the monitoring list. If the owner or operator chooses not to resample, then he or she must report the concentrations of these additional constituents to the administrative authority within seven days after completion of the initial analysis and add them to the monitoring list.*
- H. *If the owner or operator determines, pursuant to LAC 33:V.3319.D, that any concentration limits under LAC 33:V.3309 are being exceeded at any monitoring well at the point of compliance, he or she must:*
1. *notify the Office of Environmental Services, Permits Division of this finding in writing within seven days. The notification must indicate what concentration limits have been exceeded; and*
 2. *submit, to the Office of Environmental Services, Permits Division, an application for a permit modification to establish a corrective action program meeting the requirements of LAC 33:V.3321 within 180 days, or within 90 days if an engineering feasibility study has been previously submitted to the administrative authority under LAC 33:V.3317.H.5. The application must at a minimum include the following information:*

- a. *a detailed description of corrective actions that will achieve compliance with the groundwater protection standard specified in the permit under LAC 33:V.3319.A; and*
 - b. *a plan for a groundwater monitoring program that will demonstrate the effectiveness of the corrective action. Such a groundwater monitoring program may be based on a compliance monitoring program developed to meet the requirements of this Section.*
- I. *If the owner or operator determines, pursuant to LAC 33:V.3319.D, that the groundwater concentration limits under this Section are being exceeded at any monitoring well at the point of compliance, he or she may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater. In making a demonstration under this Subsection, the owner or operator must:*
- 1. *notify the Office of Environmental Services, Permits Division in writing within seven days that he intends to make a demonstration under this Paragraph;*
 - 2. *within 90 days, submit a report to the Office of Environmental Services, Permits Division which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from error in sampling, analysis or evaluation;*
 - 3. *within 90 days, submit to the Office of Environmental Services, Permits Division an application for a permit modification to make any appropriate changes to the compliance monitoring program at the facility; and*
 - 4. *continue to monitor in accord with the compliance monitoring program established under this Chapter.*
- J. *If the owner or operator determines that the compliance monitoring program no longer satisfies the requirements of this Section, he must, within 90 days, submit to the Office of Environmental Services, Permits Division an application for a permit modification to make any appropriate changes to the program.*

3321. Corrective Action Program

[NOTE: An owner or operator required to establish a corrective action program under this Subpart must, at a minimum, discharge the following responsibilities.]

- A. *The owner or operator must take corrective action to ensure that regulated units are in compliance with the groundwater protection standard under LAC 33:V.3305. The administrative authority will specify the groundwater protection standard in the facility permit, including:*
 - 1. *a list of the hazardous constituents identified under LAC 33:V.3307;*
 - 2. *concentration limits under LAC 33:V.3309 for each of those hazardous constituents;*
 - 3. *the compliance point under LAC 33:V.3311; and*
 - 4. *the compliance period under LAC 33:V.3313.*
- B. *The owner or operator must implement a corrective action program that prevents hazardous constituents from exceeding their respective concentration limits at the compliance point by removing the hazardous waste constituents or treating them in place. The permit will specify the specific measures that will be taken.*

- C. *The owner or operator must begin corrective action within a reasonable time period after the groundwater protection standard is exceeded. The administrative authority will specify that time period in the facility permit. If a facility permit includes a corrective action program in addition to a compliance monitoring program, the permit will specify when the corrective action will begin and such a requirement will operate in lieu of LAC 33:V.3319.1.2.*
- D. *In conjunction with a corrective action program, the owner or operator must establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program may be based on the requirements for a compliance monitoring program under LAC 33:V.3319 and must be as effective as that program in determining compliance with the groundwater protection standard under LAC 33:V.3305 and in determining the success of a corrective action program under LAC 33:V.3321.E, where appropriate.*
- E. *in addition to the other requirements of this Section, the owner or operator must conduct a corrective action program to remove or treat in place any hazardous constituents under LAC 33:V.3307 that exceed concentration limits under LAC 33:V.3309 in groundwater:*
1. *between the compliance point under LAC 33:V.3311 and the downgradient facility property boundary; and*
 2. *beyond the facility boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the administrative authority that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner/operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis;*
 3. *corrective action measures under this Subsection must be initiated and completed within a reasonable period of time considering the extent of contamination;*
 4. *corrective action measures under this Subsection may be terminated once the concentration of hazardous constituents under LAC 33:V.3307 is reduced to levels below their respective concentration limits under LAC 33:V.3309.*
- F. *The owner or operator must continue corrective action measures during the compliance period to the extent necessary to ensure that the groundwater protection standard is not exceeded. If the owner or operator is conducting corrective action at the end of the compliance period, he must continue that corrective action for as long as necessary to achieve compliance with the groundwater protection standard. The owner or operator may terminate corrective action measures taken beyond the period equal to the active life of the waste management area (including the closure period) if he can demonstrate, based on data from the groundwater monitoring program under LAC 33:V.3321.D, that the groundwater protection standard of LAC 33:V.3305 has not been exceeded for a period of three consecutive years.*
- G. *The owner or operator must report in writing to the Office of Environmental Assessment, Remediation Services Division on the effectiveness of the corrective action program. The owner or operator must submit these reports semi-annually; and*
- H. *if the owner or operator determines that the corrective action program no longer satisfies the requirements of this Section, he must, within 90 days, submit to the Office of Environmental Services, Permits Division an application for a permit modification to make any appropriate changes to the program.*

3322. Corrective Action

- A. *The owner or operator of a facility seeking a permit for the treatment, storage, or disposal of hazardous waste must institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste or constituents from any solid waste management unit at the facility, regardless of the time at which waste was placed in such unit.*
- B. *Corrective action will be specified in the permit in accordance with LAC 33:V.2601 and 3322. The permit will contain schedules of compliance for such corrective action (where such corrective action cannot be completed prior to issuance of the permit) and assurances of financial responsibility for completing such corrective action.*
- C. *The owner or operator must implement corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the administrative authority that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such actions. The owner or operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. Assurances of financial responsibility for such corrective action must be provided.*
- D. *Any risk-assessment-based corrective action must be protective of human health and the environment in accordance with LAC 33:I.Chapter 13.*
- E. *This Section does not apply to remediation waste management sites unless they are part of a facility subject to a permit for treating, storing, or disposing of hazardous wastes that are not remediation wastes.*

The facility has conducted an environmental assessment (Appendix U of the August 2003 Part B permit renewal application). This environmental assessment demonstrated that the facility meets the environmental performance standards of Section 3203. As described above in the response to LAC 33:V.3301.A and as required by Section V.G of the current Permit LAD 981 055 791-RN-OP-1 (Permit), the Facility has been conducting quarterly soil, sediment, and surface water sampling around the New Open Burn Pad and Retention Pond Area (NBA) in accordance with the LDEQ approved Tier 1 Sampling Plan since 2012. Quarterly Tier I sampling has continued since 2012 to the present with the latest being 1Q-2015. The results of this and previous quarterly sampling events are summarized in the First Quarter 2015 Tier 1 Detection Monitoring Report dated May 21, 2015 (EDMS #9784182).

In addition, the Facility has conducted a phased Work Plan (WP) to address the groundwater monitoring requirements of Section V.G.1.b.vi of the Permit. The results of Phase I of the WP was presented in the Groundwater Monitoring System Evaluation Report (GMSER) dated December 17, 2013 (EDMS #9139927). Based on the evaluation of well locations, well depths, screen intervals, surface conditions of the wells, groundwater flow direction and groundwater production and recharge, these wells should be suitable for use as monitor wells. Each will produce a representative sample from the permeable zone. The wells have been registered as monitor wells with the LDNR. Once the monitoring well system for the NBA is approved, the Facility will submit for review and approval a proposed groundwater monitoring program for the NBA. The GMSER is currently under review by the LDEQ.

The results of the subsurface soils and groundwater investigation and RECAP evaluation for the “Old Burn Area” (OBA) was reported in RECAP Report – Screening Option – Old Burn Area dated December 14, 2012 (EDMS #8643639). Based on the results of the investigation and RECAP evaluation completed after closure of the OBA, the Facility requested that No Further Action-At This Time (NFA-ATT) be granted to the OBA. The NFA-ATT request for the OBA was approved by the LDEQ in a letter dated June 28, 2013 (EDMS #8927041).

Therefore, a corrective action program is not required for the permitted operating miscellaneous unit. Should a corrective action program be required, all applicable subsections of Section 3321 will be addressed.

3323. Monitoring Well Abandonment and Sealing of Bore Holes

[NOTE: An owner or operator shall provide for the sealing of any vertical migration path resulting from exploratory boring and/or monitoring programs.]

A. Any boring made in evaluating a site, monitoring, or other purpose related to the hazardous waste site shall be completely filled with cement-bentonite, or other equivalent technology approved by the administrative authority. The hole shall be left open only as necessary to obtain core samples, water samples and establish the initial water level. If subsequent samples or water level readings are to be taken, the hole shall be completed as a well with suitable casing and sealing of the annulus between the hole and the casing.

The drilling of any new exploratory boring made at the facility will be done in accordance with the requirements of this section and the standards and guidelines specified in the “Construction of Geotechnical Boreholes and Ground Water Monitoring Systems” prepared by the Louisiana Department of Environmental Quality (LDEQ) and the Louisiana Department of Transportation and Development (LDOTD), dated December 2000 or the latest revision. The borings will be sealed in accordance with this document.

B. When a monitoring well is to be abandoned, the owner or operator shall obtain approval for such abandonment. A request shall be made to the administrative authority, including the following information:

- 1. name and address of the facility;*
- 2. well identification and exact location;*
- 3. well construction data, including:*
 - a. well depth and intermediate stratification;*
 - b. screen length and material;*
 - c. casing size and material;*
 - d. sealing of the annulus; and*
 - e. other pertinent data;*
- 4. reason for abandonment; and*
- 5. proposed abandonment method, including sealing method and material proposed.*

In the event the facility needs to abandon a monitoring well, a workplan will be submitted to the LDEQ for review and approval prior to beginning any abandonment work. The workplan will include the information required in Section 3323.B. The proposed abandonment procedures will conform to standards and guidelines specified in the “Construction of Geotechnical Boreholes and Ground Water Monitoring Systems” prepared by the LDEQ and LDOTD, dated December 2000, or the latest revision.

C. The administrative authority may accept the proposal or require modification as necessary to protect groundwater.

The facility acknowledges the authority of the LDEQ to review and approve the proposal required in Section 3323.B or require a modification as necessary to protect the ground water.

D. For any monitoring well which goes through or into a recognized potable water aquifer, and any well which the administrative authority feels could directly impact such aquifer, the owner or operator shall additionally complete and submit an abandonment report as required by the Water Resources Section of the Office of Public Works in the Department of Transportation and Development, or its successor agency.

The Water Resources Section of the Office of Public Works in the LDOTD requires that any monitoring well installation and abandonment work be completed by a water well contractor licensed in the State of Louisiana. The contractor and owner are required to submit an installation report for any new well and a plugging and abandonment report for any abandoned well. For any new wells and abandonment of any existing wells, the facility will complete and submit the appropriate reports as required by the LDEQ and LDOTD.

3325. Ground Water Monitoring List ¹

Table 4 lists ground water monitoring constituents.

Table 4. Ground Water Monitoring List ¹

<i>344 5tg64 5tg6yyh Common Name²</i>	<i>CAS RN³</i>	<i>Chemical Abstracts Service Index Name⁴</i>	<i>Suggest ed Methods⁵</i>	<i>PQL (µg/L)⁶</i>
<i>Acenaphthene</i>	83-32-9	<i>Acenaphthylene, 1,2- dihydro-</i>	8100	200
			8270	10
<i>Acenaphthylene</i>	208-96-8	<i>Acenaphthylene</i>	8100	200
			8270	10
<i>Acetone</i>	67-64-1	<i>2-Propanone</i>	8240	100
<i>Acetophenone</i>	98-86-2	<i>Ethanone, 1-phenyl-</i>	8270	10
<i>Acetonitrile; Methyl cyanide</i>	75-05-8	<i>Acetonitrile</i>	8015	100
<i>2-Acetylamino- fluorene; 2-AAF</i>	53-96-3	<i>Acetamide, N-9H-fluoren- 2-yl-</i>	8270	10
<i>Acrolein</i>	107-02-8	<i>2-Propenal</i>	8030	5
			8240	5
<i>Acrylonitrile</i>	107-13-1	<i>2-Propenenitrile</i>	8030	5
			8240	5
<i>Aldrin</i>	309-00-2	<i>1,4:5,8-Dimethano-naph- thalene, 1,2,3,4,10,10- hexachloro-1,4,4a,5,8, 8a,- hexa-hydro (1,4,4a, 4aβ,5β,8,8aβ)</i>	8080	0.05
			8270	10
<i>Allyl chloride</i>	107-05-1	<i>1-Propene, 3-chloro-</i>	8010	5
			8240	100
<i>4-Amino-biphenyl</i>	92-67-1	<i>[1,1'-Biphenyl]-4-amine</i>	8270	10
<i>Aniline</i>	62-53-3	<i>Benzenamine</i>	8270	10
<i>Anthracene</i>	120-12-7	<i>Anthracene</i>	8100	200
			8270	10
<i>Antimony</i>	<i>(Total)</i>	<i>Antimony</i>	6010	300
			7040	2,000
			7041	30
<i>Aramite</i>	140-57-8	<i>Sulfurous acid,2-chloro- ethyl 2-[4-(1,1-di- methylethyl) phenoxy]-1- methyl-ethyl ester</i>	8270	10
<i>Arsenic</i>	<i>(Total)</i>	<i>Arsenic</i>	6010	500
			7060	10
			7061	20
<i>Barium</i>	<i>(Total)</i>	<i>Barium</i>	6010	20
			7080	1,000

Table 4. Ground Water Monitoring List ¹

<i>344 5tg64 5tg6yyh Common Name²</i>	<i>CAS RN³</i>	<i>Chemical Abstracts Service Index Name⁴</i>	<i>Suggest ed Methods⁵</i>	<i>PQL (µg/L)⁶</i>
<i>Benzene</i>	<i>71-43-2</i>	<i>Benzene</i>	<i>8020 8240</i>	<i>2 5</i>
<i>Benzo[a]anthracene; Benanthracene</i>	<i>56-55-3</i>	<i>Benz[a]anthracene</i>	<i>8100 8270</i>	<i>200 10</i>
<i>Benzo[b]-fluoranthene</i>	<i>205-99-2</i>	<i>Benz[e]acephen-anthrylene</i>	<i>8100 8270</i>	<i>200 10</i>
<i>Benzo[k]-fluoranthene</i>	<i>207-08-9</i>	<i>Benzo[k]fluoranthene</i>	<i>8100 8270</i>	<i>200 10</i>
<i>Benzo[ghi]perylene</i>	<i>191-24-2</i>	<i>Benzo[ghi]perylene</i>	<i>8100 8270</i>	<i>200 10</i>
<i>Benzo[a]pyrene</i>	<i>50-32-8</i>	<i>Benzo[a]pyrene</i>	<i>8100 8270</i>	<i>200 10</i>
<i>Benzyl alcohol</i>	<i>100-51-6</i>	<i>Benzenemethanol</i>	<i>8270</i>	<i>20</i>
<i>Beryllium</i>	<i>(Total)</i>	<i>Beryllium</i>	<i>6010 7090</i>	<i>3 50</i>
<i>alpha-BHC</i>	<i>319-84-6</i>	<i>Cyclohexane, 1,2,3,4,5, 6-hexachloro-, (1α,2α,3β,4α,5β,6β)</i>	<i>8080 8250</i>	<i>0.05 10</i>
<i>beta-BHC</i>	<i>319-85-7</i>	<i>Cyclohexane, 1,2,3,4,5, 6-hexachloro-, (1α,2β,3α,4β,5α,6β)-</i>	<i>8080 8250</i>	<i>0.05 40</i>
<i>delta-BHC</i>	<i>319-86-8</i>	<i>Cyclohexane, 1,2,3,4,5, 6-hexachloro-, (1α,2α,3α,4β,5α,6β)-</i>	<i>8080 8250</i>	<i>0.1 30</i>
<i>gamma-BHC; Lindane</i>	<i>58-89-9</i>	<i>Cyclohexane, 1,2,3,4,5, 6-hexachloro-, (1α,2α,3β,4α,5α,6β)</i>	<i>8080 8250</i>	<i>0.05 10</i>
<i>Bis(2-chloroethoxy) methane-</i>	<i>111-91-1</i>	<i>Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-</i>	<i>8270</i>	<i>10</i>
<i>Bis(2-chloroethyl) ether</i>	<i>111-44-4</i>	<i>Ethane, 1,1'-oxybis[2-chloro-</i>	<i>8270</i>	<i>10</i>
<i>Bis(2-chloro-1-methylethyl)ether; 2,2'-Dichlorodisopropyl ether</i>	<i>108-60-1</i>	<i>Propane, 2,2'-oxybis [1-chloro-</i>	<i>8010 8270</i>	<i>100 10</i>
<i>Bis(2-ethyl-hexyl) phthalat</i>	<i>117-81-7</i>	<i>1,2-Benzenedicarboxylic acid,bis(2-ethylhexyl) ester</i>	<i>8060 8270</i>	<i>20 10</i>
<i>Bromodichloro- methane</i>	<i>75-27-4</i>	<i>Methane, bromodichloro-</i>	<i>8010 8240</i>	<i>1 5</i>

Table 4. Ground Water Monitoring List ¹

<i>344 Sig64 5tg6yyh Common Name²</i>	<i>CAS RN³</i>	<i>Chemical Abstracts Service Index Name⁴</i>	<i>Suggest ed Methods⁵</i>	<i>PQL (µg/L)⁶</i>
<i>Bromoform; Tri- bromomethane</i>	75-25-2	<i>Methane, tribromo-</i>	8010	2
			8240	5
<i>4-Bromophenyl- phenyl ether</i>	101-55-3	<i>Benzene, 1-bromo-4- phenoxy-</i>	8270	10
<i>Butyl benzyl phthalate; Benzyl butyl phthalate</i>	85-68-7	<i>1,2-Benzenedicarboxylic acid, butyl phenyl- methyl ester</i>	8060	5
			8270	10
<i>Cadmium</i>	<i>(Total)</i>	<i>Cadmium</i>	6010	40
			7130	50
			7131	1
<i>Carbon disulfide</i>	75-15-0	<i>Carbon disulfide</i>	8240	5
<i>Carbon tetrachloride</i>	56-23-5	<i>Methane, tetrachloro-</i>	8010	1
			8240	5
<i>Chlordane</i>	57-74-9	<i>4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octa- chloro-2,3,3a,4,7,7a- hexahydro-</i>	8080	0.1
			8250	10
<i>p-Chloroaniline</i>	106-47-8	<i>Benzenamine, 4 chloro-</i>	8270	20
<i>Chlorobenzene</i>	108-90-7	<i>Benzene, chloro-</i>	8010	2
			8020	2
<i>Chloro- benzilate</i>	510-15-6	<i>Benzeneacetic acid, 4- chloro-(-(4-chloro- phenyl)-(hydroxy-, ethyl ester</i>	8270	10
<i>p-Chloro- m-cresol</i>	59-50-7	<i>Phenol, 4-chloro-3- methyl-</i>	8040	5
			8270	20
<i>Chloroethane; Ethyl chloride</i>	75-00-3	<i>Ethane, chloro-</i>	8010	5
			8240	10
<i>Chloroform</i>	67-66-3	<i>Methane, trichloro-</i>	8010	0.5
			8240	5
<i>2-Chloro- naphthalene</i>	91-58-7	<i>Naphthalene, 2-chloro-</i>	8120	10
			8270	10
<i>2-Chlorophenol</i>	95-57-8	<i>Phenol, 2-chloro-</i>	8040	5
			8270	10
<i>4-Chlorophenyl phenyl ether</i>	7005-72- 3	<i>Benzene, 1-chloro-4- phenoxy-</i>	8270	10
<i>Chloroprene</i>	126-99-8	<i>1,3-Butadiene, 2-chloro-</i>	8010	50
			8240	5

Table 4. Ground Water Monitoring List ¹

344 5tg64 5tg6yyh Common Name²	CAS RN³	Chemical Abstracts Service Index Name⁴	Suggest ed Methods⁵	PQL (µg/L)⁶
<i>Chromium</i>	<i>(Total)</i>	<i>Chromium</i>	6010	70
			7190	500
			7191	10
<i>Chrysene</i>	<i>218-01-9</i>	<i>Chrysene</i>	8100	200
			8270	10
<i>Cobalt</i>	<i>(Total)</i>	<i>Cobalt</i>	6010	70
			7200	500
			7201	10
<i>Copper</i>	<i>(Total)</i>	<i>Copper</i>	6010	60
			7210	200
<i>m-Cresol</i>	<i>108-39-4</i>	<i>Phenol, 3-methyl-</i>	8270	10
<i>o-Cresol</i>	<i>95-48-7</i>	<i>Phenol, 2-methyl-</i>	8270	10
<i>p-Cresol</i>	<i>106-44-5</i>	<i>Phenol, 4-methyl-</i>	8270	10
<i>Cyanide</i>	<i>57-12-5</i>	<i>Cyanide</i>	9010	40
<i>2,4-D; 2,4-Di- chlorophenoxy- acetic acid</i>	<i>94-75-7</i>	<i>Acetic acid, (2,4- dichlorophenoxy)-</i>	8150	10
<i>4,4'-DDD</i>	<i>72-54-8</i>	<i>Benzene 1,1'-(2,2- dichloroethylidene) bis[4- chloro-</i>	8080	0.1
			8270	10
<i>4,4'-DDE</i>	<i>72-55-9</i>	<i>Benzene, 1,1'-(dichloro- ethenylidene) bis[4- chloro-</i>	8080	0.05
			8270	10
<i>4,4'-DDT</i>	<i>50-29-3</i>	<i>Benzene, 1,1'-(2,2,2- trichloroethylidene) bis[4- chloro-</i>	8080	0.1
			8270	10
<i>Diallate</i>	<i>2303-16- 4</i>	<i>Carbamothioic acid, bis(1- methylethyl)-, S-(2,3- dichloro-2-propenyl)ester</i>	8270	10
<i>Dibenz[a,h] anthracene</i>	<i>53-70-3</i>	<i>Dibenz[a,h]anthracene</i>	8100	200
			8270	10
<i>Dibenzofuran</i>	<i>132-64-9</i>	<i>Dibenzofuran</i>	8270	10
<i>Dibromochloro- methane; Chlorodi- bromomethane</i>	<i>124-48-1</i>	<i>Methane, dibromo- chloro-</i>	8010	1
			8240	5
<i>1,2-Dibromo- 3chloropropane; DBCP</i>	<i>96-12-8</i>	<i>Propane, 1,2-dibromo- 3- chloro-</i>	8010	100
			8240	5
			8270	10

Table 4. Ground Water Monitoring List ¹

344 5tg64 5tg6yyh Common Name²	CAS RN³	Chemical Abstracts Service Index Name⁴	Suggest ed Methods⁵	PQL (µg/L)⁶
1,2- Dibromoethane; Ethylene dibromide	106-93-4	Ethane, 1,2-dibromo-	8010	10
			8240	5
Di-n-butyl phthalate	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester	8060	5
			8270	10
o-Dichlorobenzene	95-50-1	Benzene, 1,2-dichloro-	8010	2
			8020	5
			8120	10
			8270	10
m- Dichlorobenzene	541-73-1	Benzene, 1,3-dichloro-	8010	5
			8020	5
			8120	10
			8270	10
p-Dichlorobenzene	106-46-7	Benzene, 1,4-dichloro-	8010	2
			8020	5
			8120	15
			8270	10
3,3'-Dichloro- benzidine	91-94-1	[1,1'-Biphenyl]4,4'- diamine, 3,3'-dichloro-	8270	20
trans-1,4- Dichloro-2-butene	110-57-6	2-Butene, 1,4- dichloro-, (E)-	8240	5
Dichlorodifluoro- methane	75-71-8	Methane, dichloro- difluoro-	8010	10
			8240	5
1,1-Dichloro- ethane	75-34-3	Ethane, 1,1-dichloro-	8010	1
			8240	5
1,2-Dichloro- ethane; Ethylene dichloride	107-06-2	Ethane, 1,2-dichloro-	8010	0.5
			8240	5
1,1-Dichloro- ethylene; Vinylidene chloride	75-35-4	Ethene, 1,1-dichloro-	8010	1
			8240	5
trans-1,2- Dichloroethylene	156-60-5	Ethene, 1,2-dichloro-(E)-	8010	1
			8240	5
2,4- Dichlorophenol	120-83-2	Phenol, 2,4-dichloro-	8040	5
			8270	10
2,6- Dichlorophenol	87-65-0	Phenol, 2,6-dichloro-	8270	10

Table 4. Ground Water Monitoring List ¹

<i>344 5tg64 5tg6yyh Common Name²</i>	<i>CAS RN³</i>	<i>Chemical Abstracts Service Index Name⁴</i>	<i>Suggest ed Methods⁵</i>	<i>PQL (µg/L)⁶</i>
<i>1,2-Dichloro- propane</i>	<i>78-87-5</i>	<i>Propane, 1,2- dichloro-</i>	<i>8010 8240</i>	<i>0.5 5</i>
<i>cis-1,3- Dichloro- propene</i>	<i>10061- 01-5</i>	<i>1-Propene, 1,3- dichloro- ,(Z)-</i>	<i>8010 8240</i>	<i>20 5</i>
<i>trans-1,3- Dichloropropene</i>	<i>10061- 02-6</i>	<i>1-Propene, 1,3- dichloro- ,(E)-</i>	<i>8010 8240</i>	<i>5 5</i>
<i>Dieldrin</i>	<i>60-57-1</i>	<i>2,7:3,6-Dimethanonaphth [2,3-b]oxirene,3,4,5, 6,9,9- hexachloro- 1a,2,2a,3,6,6a,7,7a- octahydro- (1a,2β,2a,3β,6β,6a,7β,7 a)-</i>	<i>8080 8270</i>	<i>0.05 10</i>
<i>Diethyl phthalate</i>	<i>84-66-2</i>	<i>1,2-Benzenedicarboxylic acid, diethyl ester</i>	<i>8060 8270</i>	<i>5 10</i>
<i>O,O-Diethyl O-2- pyrazinyl phosphorothioate; Thionazin</i>	<i>297-97-2</i>	<i>Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester</i>	<i>8270</i>	<i>10</i>
<i>Dimethoate</i>	<i>60-51-5</i>	<i>Phosphorodithioic acid, O,O-dimethyls-[2- (methylamino)-2-oxoethyl] ester</i>	<i>8270</i>	<i>10</i>
<i>p-(Dimethyl- amino)azobenzene</i>	<i>60-11-7</i>	<i>Benzenamine, N,N-di- methyl-4- (phenylazo)-</i>	<i>8270</i>	<i>10</i>
<i>7,12-Dimethyl- benz[a] anthracene</i>	<i>57-97-6</i>	<i>Benz[a]anthracene, 7,12- dimethyl-</i>	<i>8270</i>	<i>10</i>
<i>3,3'-Dimethyl- benzidine</i>	<i>119-93-7</i>	<i>[1,1'-Biphenyl]-4,4'- diamine, 3,3'-dimethyl-</i>	<i>8270</i>	<i>10</i>
<i>alpha, alpha- Dimethyl- phenethylamine</i>	<i>122-09-8</i>	<i>Benzeneethanamine, α,α- dimethyl-</i>	<i>8270</i>	<i>10</i>
<i>2,4-Dimethyl- phenol</i>	<i>105-67-9</i>	<i>Phenol, 2,4-dimethyl-</i>	<i>8040</i>	<i>5</i>
<i>Dimethyl phthalate</i>	<i>131-11-3</i>	<i>1,2-Benzenedicarboxylic acid, dimethyl ester</i>	<i>8060 8270</i>	<i>5 10</i>
<i>m-Dinitrobenzene</i>	<i>99-65-0</i>	<i>Benzene, 1,3-dinitro-</i>	<i>8270</i>	<i>10</i>
<i>4,6-Dinitro-o- cresol</i>	<i>534-52-1</i>	<i>Phenol, 2-methyl-4,6- dinitro-</i>	<i>8040 8270</i>	<i>150 50</i>
<i>2,4-Dinitrophenol</i>	<i>51-28-5</i>	<i>Phenol, 2,4-dinitro-</i>	<i>8040 8270</i>	<i>150 50</i>

Table 4. Ground Water Monitoring List ¹

<i>344 Stg64 Stg6yyh Common Name²</i>	<i>CAS RN³</i>	<i>Chemical Abstracts Service Index Name⁴</i>	<i>Suggest ed Methods⁵</i>	<i>PQL (µg/L)⁶</i>
<i>2,4-Dinitro- toluene</i>	<i>121-14-2</i>	<i>Benzene, 1-methyl-2, 4- dinitro-</i>	<i>8090 8270</i>	<i>0.2 10</i>
<i>2,6-Dinitro- toluene</i>	<i>606-20-2</i>	<i>Benzene, 2-methyl- 1,3- dinitro-</i>	<i>8090 8270</i>	<i>0.1 10</i>
<i>Dinoseb; DNBP; 2-sec-Butyl- 4,6- dinitrophenol</i>	<i>88-85-7</i>	<i>Phenol, 2-(1-methyl- propyl)-4,6-dinitro-</i>	<i>8150 8270</i>	<i>1 10</i>
<i>Di-n-octyl phthalate</i>	<i>117-84-0</i>	<i>1,2-Benzenedicarboxylic acid, dioctyl ester</i>	<i>8060 8270</i>	<i>30 10</i>
<i>1,4-Dioxane</i>	<i>123-91-1</i>	<i>1,4-Dioxane</i>	<i>8015</i>	<i>150</i>
<i>Diphenylamine</i>	<i>122-39-4</i>	<i>Benzenamine, N-phenyl-</i>	<i>8270</i>	<i>10</i>
<i>Disulfoton</i>	<i>298-04-4</i>	<i>Phosphorodithioic acid, O,O-diethyl S-[2- (ethylthio)ethyl]ester</i>	<i>8140 8270</i>	<i>2 10</i>
<i>Endosulfan I</i>	<i>959-98-8</i>	<i>6,9-Methano-2,4,3- benzodioxathiepin 6,7,8, 9,10,10-hexachloro-1,5, 5a,6,9,9a-hexahydro-, 3- oxide, (3ζ,5aβ,6ζ,9ζ,9aβ)-</i>	<i>8080 8250</i>	<i>0.1 10</i>
<i>Endosulfan II</i>	<i>3213-65- 9</i>	<i>6,9-Methano-2,4,3- benzodioxathiepin, 6,7,8,9,10,10-hexa-chloro- 1,5,5a,6,9, 9a-hexahydro-, 3-oxide, (3ζ,5aζ,6β,9ζ,9aζ)-</i>	<i>8080</i>	<i>0.05</i>
<i>Endosulfan sulfate</i>	<i>1031-07- 8</i>	<i>6,9-Methano-2,4,3- benzodioxathiepin, 6,7,8,9,10,10-hexa-chloro- 1,5,5a,6,9,9a- hexahydro-, 3,3-dioxide</i>	<i>8080 8270</i>	<i>0.5 10</i>
<i>Endrin</i>	<i>72-20-8</i>	<i>2,7:3,6- Dimethanonaphth[2,3- b]oxirene,3,4,5,6,9,9- hexachloro- 1a,2,2a,3,6,6a,7,7a- octahydro-, (1aζ,2β,2aβ, 3ζ,6ζ,6aβ, 7β,7aζ)-</i>	<i>8080 8250</i>	<i>0.1 10</i>
<i>Endrin aldehyde</i>	<i>7421-93- 4</i>	<i>1,2,4- Methenocyclopenta[cd] pentalene- 5- carboxaldehyde, 2,2a,3,3,4,7-hexachloro- decahydro-, (1ζ,2β,2aβ, 4β,4aβ,5β,6aβ,6bβ,7R*)-</i>	<i>8080 8270</i>	<i>0.2 10</i>

Table 4. Ground Water Monitoring List ¹

344 5tg64 5tg6yyh Common Name²	CAS RN³	Chemical Abstracts Service Index Name⁴	Suggest ed Methods⁵	PQL (µg/L)⁶
<i>Ethylbenzene</i>	100-41-4	<i>Benzene, ethyl-</i>	8020 8240	2 5
<i>Ethyl methacrylate</i>	97-63-2	<i>2-Propenoic acid, 2- methyl-, ethyl ester</i>	8015 8240 8270	10 5 10
<i>Ethyl methane- sulfonate</i>	62-50-0	<i>Methanesulfonic acid, ethyl ester</i>	8270	10
<i>Famphur</i>	52-85-7	<i>Phosphorothioic acid, O- [4-[(dimethylamino) sulfonyl]phenyl]-O,O-di- methyl ester</i>	8270	10
<i>Fluoranthene</i>	206-44-0	<i>Fluoranthene</i>	8100	200
<i>Fluorene</i>	86-73-7	<i>9H-Fluorene</i>	8100 8270	200 10
<i>Heptachlor</i>	76-44-8	<i>4,7-Methano-1H-indene, 1,4,5,6,7,8,8-hepta-chloro- 3a,4,7,7a-tetrahydro-</i>	8080 8270	0.05 10
<i>Heptachlor epoxide</i>	1024-57- 3	<i>2,5-Methano-2H-indeno [1,2-b]oxirene,2,3,4,5, 6,7,7-heptachloro- 1a,1b,5,5a,6,6ahexa- hydro-, (1aζ,1bβ,2ζ, 5ζ,5aβ,6β,6aζ)</i>	8080 8270	1 10
<i>Hexachlorobenzen e</i>	118-74-1	<i>Benzene, hexachloro-</i>	8120 8270	0.5 10
<i>Hexachlorobutadie ne</i>	87-68-3	<i>1,3-Butadiene, 1,1,2,3,4,4- hexachloro-</i>	8120 8270	5 10
<i>Hexachloro- cyclopentadiene</i>	77-47-4	<i>1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-</i>	8120 8270	5 10
<i>Hexachloroethane</i>	67-72-1	<i>Ethane, hexachloro-</i>	8120 8270	0.5 10
<i>Hexachlorophene</i>	70-30-4	<i>Phenol,2,2'-methyl-enebis [3,4,6- tri-chloro-</i>	8270 8270	10 10
<i>Hexachloropropen e</i>	1888-71- 7	<i>1-Propene,1,1,2,3,3,3- hexachloro</i>	8270	10
<i>2-Hexanone</i>	591-78-6	<i>2-Hexanone</i>	8240	50
<i>Indeno(1,2,3- cd) pyrene</i>	193-39-5	<i>Indeno[1,2,3-cd] pyrene</i>	8100 8270	200 10
<i>Isobutyl alcohol</i>	78-83-1	<i>1-Propanol, 2-methyl-</i>	8015	50

Table 4. Ground Water Monitoring List ¹

344 Stg64 Stg6yyh Common Name²	CAS RN³	Chemical Abstracts Service Index Name⁴	Suggest ed Methods⁵	PQL (µg/L)⁶
<i>Isodrin</i>	465-73-6	<i>1,4,5,8-Dimethano-naphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro- (1α,4α,4aβ,5β,8β,8aβ) -</i>	8270	10
<i>Isophorone</i>	78-59-1	<i>2-Cyclohexen-1-one, 3,5,5-trimethyl-</i>	8090 8270	60 10
<i>Isosafrole</i>	120-58-1	<i>1,3-Benzodioxole, 5-(1-propenyl)-</i>	8270	10
<i>Kepone</i>	143-50-0	<i>1,3,4-Metheno-2H-cyclobuta-[cd]pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachloroocta-hydro-</i>	8270	10
<i>Lead</i>	<i>(Total)</i>	<i>Lead</i>	6010 7420 7421	40 1,000 10
<i>Mercury</i>	<i>(Total)</i>	<i>Mercury</i>	7470	2
<i>Methacrylonitrile</i>	126-98-7	<i>2-Propenenitrile, 2-methyl-</i>	8015 8240	5 5
<i>Methapyrilene</i>	91-80-5	<i>1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-</i>	8270	10
<i>Methoxychlor</i>	72-43-5	<i>Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-methoxy-</i>	8080 8270	2 10
<i>Methyl bromide; Bromomethane</i>	74-83-9	<i>Methane, bromo-</i>	8010 8240	20 10
<i>Methyl chloride; Chloromethane</i>	74-87-3	<i>Methane, chloro-</i>	8010 8240	1 10
<i>3-Methyl- cholanthrene</i>	56-49-5	<i>Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-</i>	8270	10
<i>Methylene bromide; Dibromomethane</i>	74-95-3	<i>Methane, dibromo-</i>	8010 8240	15 5
<i>Methylene chloride; Dichloromethane</i>	75-09-2	<i>Methane, dichloro-</i>	8010 8240	5 5
<i>Methyl ethyl ketone; MEK</i>	78-93-3	<i>2-Butanone</i>	8015 8240	10 100
<i>Methyl iodide; Iodomethane</i>	74-88-4	<i>Methane, iodo-</i>	8010 8240	40 5

Table 4. Ground Water Monitoring List ¹

344 5tg64 5tg6yyh Common Name²	CAS RN³	Chemical Abstracts Service Index Name⁴	Suggest ed Methods⁵	PQL (µg/L)⁶
Methylmethacrylate	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester	8015 8240	2 5
Methyl methanesulfonate	66-27-3	Methanesulfonic acid, methyl ester	8270	10
2-Methylnaphthalene	91-57-6	Naphthalene, 2-methyl-	8270	10
Methyl parathion; Parathion methyl	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl)ester	8140 8270	0.5 10
4-Methyl-2-pentanone; Methyl misobutyl ketone	108-10-1	2-Pentanone, 4-methyl	8015 8240	5 50
Naphthalene	91-20-3	Naphthalene	8100 8270	200 10
1,4-Naphthoquinone	130-15-4	1,4-Naphthalene-dione	8270	10
1-Naphthylamine	134-32-7	1-Naphthalenamine	8270	10
2-Naphthylamine	91-59-8	2-Naphthalenamine	8270	10
Nickel	(Total)	Nickel	6010 7520	50 400
o-Nitroaniline	88-74-4	Benzenamine, 2-nitro-	8270	50
m-Nitroaniline	99-09-2	Benzenamine, 3-nitro-	8270	50
p-Nitroaniline	100-01-6	Benzenamine, 4-nitro-	8270	50
Nitrobenzene	98-95-3	Benzene, nitro-	8090 8270	40 10
o-Nitrophenol	88-75-5	Phenol, 2-nitro-	8040 8270	5 10
p-Nitrophenol	100-02-7	Phenol, 4-nitro-	8040	10
4-Nitroquinoline, 1-oxide	56-57-5	Quinoline, 4-nitro-, 1-oxide	8270	10
N-Nitrosodi-n-butylamine	924-16-3	1-Butanamine, N-butyl-N-nitroso	8270	10
N-Nitrosodiethylamine	55-18-5	Ethanamine, N-ethyl-N-nitroso	8270	10
N-Nitrosodimethylamine	62-75-9	Methanamine, N-methyl-N-nitroso-	8270	10
N-Nitrosodiphenylamine	86-30-6	Benzenamine, N-nitroso-N-phenyl-	8270	10
N-Nitrosodipropylamine; Di-n-propyl-nitrosamine	621-64-7	1-Propanamine, N-nitroso-N-propyl-	8270	10

Table 4. Ground Water Monitoring List ¹

344 5tg64 5tg6yyhCommon Name²	CAS RN³	Chemical Abstracts Service Index Name⁴	Suggest ed Methods⁵	PQL (µg/L)⁶
<i>N-Nitrosomethylethylamine</i>	10595-95-6	<i>Ethanamine, N-methyl- N-nitroso-</i>	8270	10
<i>N-Nitrosomorpholine</i>	59-89-2	<i>Morpholine, 4-nitroso-</i>	8270	10
<i>N-Nitrosopiperidine</i>	100-75-4	<i>Piperidine, 1- nitroso-</i>	8270	10
<i>N-Nitrosopyrrolidine</i>	930-55-2	<i>Pyrrolidine, 1- nitroso-</i>	8270	10
<i>5-Nitro-ortho-toluidine</i>	99-55-8	<i>Benzenamine, 2-methyl-5-nitro-</i>	8270	10
<i>Parathion</i>	56-38-2	<i>Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester</i>	8270	10
<i>Polychlorinated biphenyls; PCBs</i>	See Note 7	<i>1,1'-Biphenyl, chloro derivatives</i>	8080 8250	50 100
<i>Polychlorinated dibenzo-p-dioxins; PCDDs</i>	See Note 8	<i>Dibenzo[b,e][1,4]dioxin, chloro derivatives</i>	8280	0.01
<i>Polychlorinated dibenzofurans; PCDFs</i>	See Note 9	<i>Dibenzofuran, chloro derivatives</i>	8280	0.01
<i>Pentachlorobenzene</i>	608-93-5	<i>Benzene, pentachloro-</i>	8270	10
<i>Pentachloroethane</i>	76-01-7	<i>Ethane, pentachloro-</i>	8240 8270	5 10
<i>Pentachloronitrobenzene</i>	82-68-8	<i>Benzene, pentachloronitro-</i>	8270	10
<i>Pentachlorophenol</i>	87-86-5	<i>Phenol, pentachloro-</i>	8040 8270	5 50
<i>Phenacetin</i>	62-44-2	<i>Acetamide, N-(4-ethoxyphenyl)</i>	8270	10
<i>Phenanthrene</i>	85-01-8	<i>Phenanthrene</i>	8100 8270	200 10
<i>Phenol</i>	108-95-2	<i>Phenol</i>	8040 8270	1 10
<i>p-Phenylenediamine</i>	106-50-3	<i>1,4- Benzenediamine</i>	8270	10
<i>Phorate</i>	298-02-2	<i>Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester</i>	8140 8270	2 10

Table 4. Ground Water Monitoring List ¹

344 Stg64 Stg6yyh Common Name²	CAS RN³	Chemical Abstracts Service Index Name⁴	Suggest ed Methods⁵	PQL (µg/L)⁶
2-Picoline	109-06-8	Pyridine, 2-methyl-	8240	5
			8270	10
Pronamide	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	8270	10
Propionitrile; Ethyl cyanide	107-12-0	Propanenitrile	8015	60
			8240	5
Pyrene	129-00-0	Pyrene	8100	200
			8270	10
Pyridine	110-86-1	Pyridine	8240	5
			8270	10
Safrole	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	8270	10
Selenium	(Total)	Selenium	6010	750
			7740	20
			7741	20
Silver	(Total)	Silver	6010	70
			7760	100
Silvex; 2,4,5-TP	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	8150	2
Styrene	100-42-5	Benzene, ethenyl-	8020	1
			8240	5
Sulfide	18496-25-8	Sulfide	9030	10,000
2,4,5-T; 2,4,5-, Trichlorophenoxy- acetic acid	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-	8150	2
2,3,7,8-TCDD; 2,3,7,8-Tetra- chlorodibenzo-p- dioxin	1746-01-6	Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-	8280	0.005
1,2,4,5-Tetra- chlorobenzene	95-94-3	Benzene, 1,2,4,5-tetrachloro-	8270	10
1,1,1,2-Tetra- chloroethane	630-20-6	Ethane, 1,1,1,2-tetrachloro-	8010	5
			8240	5
1,1,2,2-Tetra- chloroethane	79-34-5	Ethane, 1,1,2,2-tetrachloro-	8010	0.5
			8240	5

Table 4. Ground Water Monitoring List¹

344 5tg64 5tg6yyh Common Name²	CAS RN³	Chemical Abstracts Service Index Name⁴	Suggest ed Methods⁵	PQL (µg/L)⁶
Tetrachloro- ethylene; Perchloroethylene; Tetrachloroethene	127-18-4	Ethene, tetrachloro-	8010 8240	0.5 5
2,3,4,6-Tetra- chlorophenol	58-90-2	Phenol, 2,3,4,6- tetrachloro-	8270	10
Tetraethyl dithio- pyrophosphate; Sulfotepp	3689-24- 5	Thiodiphosphoric acid ([(HO) ₂ P(S)] ₂ O), tetraethyl ester	8270	10
Thallium	(Total)	Thallium	6010 7840 7841	400 1,000 10
Tin	(Total)	Tin	7870	8,000
Toluene	108-88-3	Benzene, methyl-	8020 8240	2 5
o-Toluidine	95-53-4	Benzenamine, 2-methyl-	8270	10
Toxaphene	8001-35- 2	Toxaphene	8080 8250	2 10
1,2,4-Tri- chlorobenzene	120-82-1	Benzene, 1,2,4-trichloro-	8270	10
1,1,1-Tri- chloroethane; Methylchloroform	71-55-6	Ethane, 1,1,1-trichloro-	8240	5
1,1,2-Tri- chloroethane	79-00-5	Ethane, 1,1,2-,trichloro-	8010 8240	0.2 5
Trichloro- ethylene; Trichloroethene	79-01-6	Ethene, trichloro-	8010 8240	1 5
Trichlorofluoro- methane	75-69-4	Methane, trichlorofluoro-	8010 8240	10 5
2,4,5-Tri- chlorophenol	95-95-4	Phenol, 2,4,5-trichloro-	8270	10
2,4,6-Tri- chlorophenol	88-06-2	Phenol, 2,4,6-trichloro-	8040 8270	5 10
1,2,3-Tri- chloropropane	96-18-4	Propane, 1,2,3-tri-chloro-	8010 8240	10 5
O,O,O-Triethyl phosphorothioate	126-68-1	Phosphorothioic acid, O,O,O-triethyl ester	8270	10
sym-Trinitro- benzene	99-35-4	Benzene, 1,3,5- trinitro	8270	10

Table 4. Ground Water Monitoring List¹

<i>344 Stg64 Stg6yyh Common Name²</i>	<i>CAS RN³</i>	<i>Chemical Abstracts Service Index Name⁴</i>	<i>Suggest ed Methods⁵</i>	<i>PQL (µg/L)⁶</i>
Vanadium	(Total)	Vanadium	6010 7910 7911	80 2,000 40
Vinyl acetate	108-05-4	Acetic acid, ethenyl ester	8240	5
Vinyl chloride	75-01-4	Ethene, chloro-	8010 8240	2 10
Xylene (total)	1330-20-7	Benzene, dimethyl-	8020 8240	5 5
Zinc	(Total)	Zinc	6010 7950	20 50

¹ The regulatory requirements pertain only to the list of substances; the right-hand columns (Methods and PQL) are given for informational purposes only. See also footnotes 5 and 6.

² Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

³ Chemical Abstracts Service registry number. Where "Total" is entered, all species in the ground water that contain this element are included.

⁴ CAS index names are those used in the ninth Cumulative Index.

⁵ Suggested Methods refer to analytical procedure numbers used in EPA Report SW-846, Test Methods for Evaluating Solid Waste, Third Edition. Analytical details can be found in SW-846 and in documentation on file at the agency. The packed column gas chromatography methods 8010, 8020, 8030, 8040, 8060, 8080, 8090, 8110, 8120, 8140, 8150, 8240, and 8250 were promulgated methods through Update IIB of SW-846 and, as of Update III, the agency has replaced these methods with "capillary column GC methods," as the suggested methods. Caution: The methods listed are representative SW-846 procedures and may not always be the most suitable method(s) for monitoring an analyte under the regulations.

⁶ Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in ground waters that can be reliably determined within specified limits of precision and accuracy by the

indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. Caution: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation.

⁷ Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals, including constituents of Aroclor-1016 (CAS RN 12674-11-2), Aroclor-1221 (CAS RN 11104-28-2), Aroclor-1232 (CAS RN 11141-16-5), Aroclor-1242 (CAS RN 53469-21-9), Aroclor-1248 (CAS RN 12672-29-6), Aroclor-1254 (CAS RN 11097-69-1), and Aroclor-1260 (CAS RN 11096-82-5). The PQL shown is an averaged value for PCB congeners.

⁸ This category contains congener chemicals, including tetrachlorodibenzo-p-dioxins (see also 2,3,7,8-TCDD), pentachlorodibenzo-p-dioxins, and hexachlorodibenzo-p-dioxins. The PQL shown is an average value for PCDD congeners.

⁹ This category contains congener chemicals, including tetrachlorodibenzofurans, pentachlorodibenzofurans, and hexachlorodibenzofurans. The PQL shown is an average value for PCDF congeners.

APPENDIX G
WASTE ANALYSIS PLAN

WASTE ANALYSIS PLAN

**CLEAN HARBORS COLFAX, LLC
THERMAL TREATMENT FACILITY
3763 HIGHWAY 471
COLFAX, LOUISIANA**

**LAD 0981055791
AI #32096**

**WASTE ANALYSIS PLAN
Clean Harbors Colfax, LLC**

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Clean Harbors Colfax, LLC**

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WASTE ANALYSIS PLAN Clean Harbors Colfax, LLC

1.0 INTRODUCTION

In accordance with the regulatory requirements set forth in LAC 33:V.1519, Clean Harbors Colfax, LLC (Facility) has developed this Waste Analysis Plan (WAP). As required by LAC 33:V.517.E, the Facility has included this WAP as an integral part of the Part II Permit Application for its hazardous waste treatment facility located near Colfax, Louisiana. Implementation of the procedures set forth in this plan will ensure that this facility remains in compliance with all requirements of LAC 33:V.1519. A copy of this plan will be available at the facility at all times.

The purpose of this Waste Analysis Plan is to document the necessary sampling methodologies, analytical techniques and overall procedures that are undertaken for all hazardous and nonhazardous wastes (hereinafter "wastes") that enter this facility for storage, treatment and disposal. Specifically, the plan delineates the following:

- **Pre-Acceptance Procedures** (Section 2.0) to determine the acceptability of a particular waste stream pursuant to facility permit conditions and operating capabilities prior to any shipment of that waste to the facility.
- **Materials Characterization/Materials Inventory** (Section 3.0) to compile historical and current system information including waste constituent, net explosive weight, generator, profile and manifested quantities in order to monitor inventory and permitted daily and annual burn rates.
- **Incoming Waste Evaluation** (Section 4.0) to verify that the delivered waste matches the accompanying manifest, pre-acceptance documentation, and the conditions of the facility permit.
- **Site Generated Waste Evaluation** (Section 5.0) to ensure site generated waste is properly characterized and managed in accordance with applicable regulatory requirements.
- **Process Operations** (Section 6.0) to maintain safe and appropriate methods of storage, treatment, disposal or movement of wastes within the facility.
- **Sampling, Analysis and QA/QC** (Section 7.0)

It is Facility policy that wastes handled will be subjected to these procedures. Strict compliance with this policy will ensure that this facility will be in compliance with applicable permits and regulations and is operated in a safe and environmentally sound manner. Certification by a Louisiana Registered Professional Engineer, per Permit Condition III.C.3.a, is included in Exhibit A.

2.0 PRE-ACCEPTANCE PROCEDURES

Pre-acceptance control is the mechanism for deciding to reject or accept a particular type of waste, prior to its shipment to the facility, based on the conditions or limitations of existing permits and regulations, and its compatibility with other wastes being stored, treated and/or disposed at the facility, in compliance with LAC 33:V.1519.A.1.

The Facility will gather sufficient information on incoming waste streams via the profile to allow proper storage and treatment without compromising worker safety. The generator provides chemical and physical characterization for each waste. If required during the approval process, additional information may be obtained from other reputable sources, such as the Department of Defense, and will be referenced in the incoming waste records for each type of waste accepted at the Facility.

For each new waste stream that is a candidate for processing at the Facility, the following procedures are implemented:

- Each generator who wishes to ship waste to the Facility will provide a completed and signed Waste Profile Form attached as Exhibit B (or an equivalent form) in compliance with LAC 33:V.1519.B.6. The profile may be in electronic format. The generator may also supply developed data and existing published or documented data on the waste or wastes generated from similar processes in compliance with LAC 33:V.1519.A.2.
- The Facility, in conjunction with chemists at the corporate offices, will review and verify the information contained on the Waste Profile Form. In addition, certain information contained on the form will be confirmed through the expertise of Facility personnel based on historical knowledge of similar wastes that have been processed at the Facility in the past.
- After reviewing all available data, the Facility and/or Corporate chemists will determine the acceptability of the waste based on: (1) the permit conditions for the facility, and (2) the on-site availability of the proper and safe waste management techniques. At this facility, proper and safe waste management techniques involve the detonation/open burning of the waste materials on burn pads. If a waste is considered too volatile or too reactive (i.e., such that it could cause a damaging detonation), then that waste would either not be accepted or would only be managed in very small quantities so as to avoid undesirable results.
- In compliance with LAC 33:V.1519.A.3 and 1519.B.4, the pre-acceptance evaluation will be repeated when a generator notifies the Facility that the process generating the waste has changed, although due to the uniqueness of each waste stream processed at the facility, the likelihood of process changes is considered small. Similarly, the pre-acceptance evaluation may also need to be repeated if the Facility has reason to suspect that the waste does not conform to pre-acceptance documentation. Otherwise, the pre-acceptance evaluation will be completed on an annual basis for all wastes that continue to be shipped to the Facility to assure the waste

characteristics and other information on the Waste Profile Form have not significantly changed.

- Following the pre-acceptance evaluation the generator will be informed whether or not the waste stream will be acceptable at the Facility. The notification will include documentation that the Facility has the appropriate permits for the waste the generator is shipping and that the facility will accept said waste.

3.0 MATERIALS CHARACTERIZATION / MATERIALS INVENTORY

Historically, annual waste receipts are characterized as follows:

Waste Description	Quantity (lbs)	Chemical Constituent Content	% Of Annual Receipts
Fireworks	50,088	Barium chromate, potassium nitrate, charcoal, sulphur, graphite, lead azide, potassium perchlorate, sodium nitrate	5-10
Detonators	42,933	HMX, RDX, Lead azide, PETN, Lead Styphnate, Potassium Chlorate	4-8
Propellants	71,555	RDX, Lead Citrate, Zirconium Carbide, Nitroglycerin, Nitrocellulose, Ammonium Perchlorate, Aluminum Powder, Copper Chromite	10-20
Power charges	50,088	HMX, PETN, Lead Azide, RDX, strontium nitrate, potassium perchlorate, potassium nitrate, sulfur	5-10
Shaped charges	78,711	HMX, HNS, RDX, PETN, aluminum, graphite, Lead	10-20
Igniters	50,088	Charcoal, potassium	5-10

		nitrate, sulfur, barium chromate, potassium perchlorate, carbon	
Fuses	42,933	Charcoal, sulphur, graphite, lead azide, RDX, carbon, potassium perchlorate, zirconium, potassium nitrate, antimony sulfide,	2-10
Bulk high explosives	143,111	RDX, HMX, PETN, TNT, Lead Azide, Lead Styphnate,	20-25
Rocket motors	85,866	Aluminum Powder, Ammonium Perchlorate, Polybutadiene, Diisocyanate, Nitrocellulose, Iron Oxide, magnesium oxide	10-15
Detonating cord	50,088	PETN, RDX, HMX, HNS, PYX	5-10
Air bag inflators	14,311	Viton, Zirconium Potassium Perchlorate, Argon, Helium	2-4
Explosive contaminated debris	35,777	RDX, TNT, HMX, PETN, Sodium nitrate, Lead Azide, Lead Styphnate, Nitrocellulose	5-15

Facility management expects the next year's receipts to be similar to historical information, but they are subject to change. Waste receipts are dependent on a wide variety of market parameters.

System information is currently available for waste received and processed that includes generators, profiles and manifested quantity. This information can be manually cross-referenced to specific profile chemical detail for each waste managed by OB/OD. Refer to the

profile chemical constituent detail found in the composition section in the attached profile (Exhibit B). A report has been developed to summarize specific chemical constituent detail that is accepted and managed by OB/OD. (Waste Constituents Detail Report in Exhibit C) This report lists the constituents of each waste profile and can be sorted to determine the net explosive weight (NEW) of each waste. Generators may also provide NEW information as stand alone documents that are kept on file at the facility.

NEW from profile (assuming two explosive constituents) is calculated as follows:

$$\text{Weight}_{\text{Container}} * \%_{\text{avg}} \text{ Explosive Constituent}_1 = \text{NEW}_1$$

$$\text{Weight}_{\text{Container}} * \%_{\text{avg}} \text{ Explosive Constituent}_2 = \text{NEW}_2$$

$$\text{NEW}_{\text{Total}} = \text{NEW}_1 + \text{NEW}_2$$

Example – Profile CH289004 from the Waste Constituents Report, Exhibit C:

NEW constituent	Profile range (%)*	Container weight	NEW (#)
Black powder	2-4	52	1.56
Lead azide	0-1	52	0.26
Potassium perchlorate	7-9	52	4.16
Sodium nitrate	6-8	52	3.64
Total			9.62

*Note: midpoint of concentration of profiled explosive constituent is used to calculate NEW

The mass of each explosive or reactive waste is a subset of the total weight received also referenced as net explosive weight (NEW). This amount can be determined from the profile composition detail. The remaining constituents may include metal casings, cardboard, plastic and/or other inert materials.

The Facility is limited to processing a maximum of 1,500 pounds/hour and 2,055,000 pounds/yr of NEW by OB/OD. When a burn is prepared, the total NEW is calculated by waste stream and is documented on a waste treatment report. An example is attached as Exhibit D.

The Facility's electronic information system (WINWEB or equivalent) tracks all inventory by location while on-site. An example of a system inventory report is included, as Exhibit E. (Specific generator information has been deleted in the attached document). The electronic information system also tracks all waste received and processed, by generator, profile and/or waste type. Each container and shipment is linked to the applicable profile that includes physical properties, individual constituents and Department of Transportation (DOT) shipping names.

Existing system reports allow inventories for any specified timeframe that include:

- Manifest
- Process code
- Transporter EPA ID
- Generator EPA ID
- Received date
- Profile
- Total quantity received in unit of measure (typically pounds)

Each profile lists the composition amount of each chemical constituent. An example is attached as Exhibit B (specific generator information has been deleted in the attached document). Please note the composition information found in the profile's Section D.

Inventory records also include:

- Generator data supplied during profiling
- Shipment manifests
- QA/QC records

Summarized on Table 1 is a list of analytes that would be expected in the wastes based on historical waste receipt records for the past 2 years. These analytes have been segregated by the SW-846, latest edition analytical test methods. This table will be the basis for analytical testing of the waste residues generated at the Facility.

4.0 INCOMING WASTE EVALUATION

Incoming wastes will arrive in containers, generally ranging from very small boxes to 55-gallon drums, although other size containers may be utilized in accordance with DOT shipping requirements. Facility personnel will visually examine the waste received to evaluate whether the actual type and quantity matches the representations on the manifest Land Disposal Restriction Form (see Exhibit F for an example) and in the profile. Containers are opened and contents visually compared with the profile and/or manifest description. Some profiles will have drawings and/or pictures of the waste. Due to the reactive nature of the waste managed at the facility, no physical samples of incoming waste will be collected. The Institute of Makers of Explosives made the following observation in their response to EPA comments (December 1988) on the RCRA Guidance Manual for Permitting Commercial Explosives Industry Open Burning/Open Detonation Facilities (OB/OD).

"A critical aspect of this guidance manual and in general regarding disposal of explosive waste in the explosives industry is the issue of safety. IME has

generally made the conservative assumption that waste-containing elements of explosive nature presents the risk of an explosion. IME is not aware of a test method, nor has EPA promulgated a test method, that determines reactivity and that allows for a completely accurate determination of whether waste-containing constituents of an explosive nature presents the risk of explosion upon disposal. It is such a risk that mandates the use of OB/OD since disposal through other means presents the risk of an explosion with a related threat to worker safety. The industry has always made worker protection the highest priority and would be very uncomfortable in departing from that position now."

Counting containers and comparing to the manifested quantity will confirm the quantity of waste received. Chemical and physical characteristics with regard to ignitibility, reactivity and incompatibility in accordance with LAC 33:V: 2113 and 2115 will be done by a review of the profile information and visually confirming that the waste received matches the profile.

Acceptability of the waste will be determined by comparing the material received with the manifest and with the waste profiles that are maintained in the Facility's records. The Facility accepts only wastes listed in Part I of the permit application. If a waste profile is not found, the facility will contact the generator to attempt to locate waste information. A new waste profile will be obtained to permit a determination of the acceptability of the waste or the waste will be rejected.

Facility personnel who conduct the acceptance inspection will classify the waste as being non-conforming or off-specification if it is significantly different in any characteristics from the information provided on the Waste Profile Form or if it is significantly different in volume from that shown on the manifest.

Waste found to be off specification will be rejected, or it may be re-evaluated for possible acceptance by the Facility despite the variance (possibly under an alternate Waste Profile). The re-evaluation will be based on the following criteria:

- Permit authorization,
- Additional information regarding explosive constituents,
- Discussions with the generator,
- Changes in generator facility conditions, and
- General Manager's judgment

Facility personnel will discuss and attempt to resolve with the generator any discrepancy between the actual waste and the information indicated on the manifest. Any waste that is non-conforming will be designated as off-specification in the electronic information system. The waste will be rejected or a new profile generated to accurately reflect the waste within 30 days of off-specification discovery. If a new profile is generated and the waste accepted it will be received and tracked similar to other wastes. The operating record will document the resolution.

If the load is accepted, the General Manager, or designee, will sign and date the manifest.

An incoming waste unloading report will be generated for each shipment accepted. The report will note the manifest number, quantity, type, and on-site storage destination of each shipment. A unique bar code label is generated by the electronic information system and affixed to each container. This is used to track container inventory and process information. The system inventory record is updated when wastes are moved to different storage magazines or treatment areas. The inventory report in Exhibit E is indicative of the system tracking capability.

5.0 SITE GENERATED WASTE EVALUATION

5.1 General

This section addresses waste generated from the OB/OD treatment process. Specific waste streams include:

- Residue remaining from treating characteristic (D003) hazardous waste;
- Residue remaining from treated listed hazardous waste;
- Rain water from burn pans and buildings; and
- Rainwater collected in the Facility's storm water pond.

All ash and residue resulting from the thermal treatment process will be stored on-site within a contained area prior to shipment off-site for disposal. Residue from the treatment of characteristic waste will be kept separate from the residue generated in the treatment of listed waste. This waste analysis plan contains methods for evaluating the ash from the treatment of characteristic waste to determine the proper method of handling and disposal. For additional information on the management of the ash residues, refer to Exhibit G, Ash Management SOP.

The burn pans are kept covered during rainfall events and when not in use. This minimizes the amount of water, if any, that is collected. In most cases, this small amount of water is consumed during the next burn event in this pan. Any rain water or rinse water collected from burn pans and buildings will be stored less than 90 days and burned in the Facility's

OB/OD units.

Storm water from the site's storm water collection pond will be analyzed per the Tier 1 sampling protocol and the site's LPDES Storm Water Plan. This water will be shipped offsite for treatment and disposal or discharged out the Facility's permitted NPDES outfall depending on the results of testing.

5.2 Waste Characterization - Residues from Treatment of Characteristic Waste

As previously stated, residue from the treatment of characteristic waste will be separated from residue from the treatment of listed waste. The frequency of sampling will be based on the rate of filling the container, rather than a chronological interval. Sampling will be done at least quarterly, as defined in Section II.C.2.e of the Permit and conducted as follows:

Three sub-samples will be taken from each container to be shipped, as it is being filled. These will be composited after the final sub-sample is obtained and analyzed as a single sample.

Sub-samples will be collected as follows; Sub-sample No. 1 will be collected from the ash surface near one end of the container, Sub-sample No. 2 will be collected from the middle of the container at mid-depth of the ash, and Sub-sample No. 3 collected from the opposite end of the container near the bottom.

Sub-samples will be held and composited for final analysis.

The composite sample will be analyzed to determine if the residue exhibits the characteristic of TCLP toxicity for the analytes listed on Table 1, which includes the metals listed in LAC 33:V.4903. Testing will be in accordance with the methods published U.S. Environmental Protection Agency (EPA) *Test Methods for Evaluating Solid Waste*; SW-846; latest edition. Extraction protocol will comply with SW-846 Method 1310A. Analysis for these analytes will be completed in accordance with SW-846 methods, latest edition.

QA/QC documentation to be provided by the contract analytical laboratory will include:

- sample documentation;
- documentation of initial and continuing calibration;
- determination and documentation of detection limits;
- analyte identification and quantification;
- matrix spike recoveries;

- performance evaluation samples;
- analytical error determination; and
- total measurement error determination.

Sample containers will be labeled with a sample number and will be accompanied by a chain-of-custody form, which will include the following information:

1. Sample location,
2. Date,
3. Time,
4. Sampling personnel, and
5. The parameters for which the waste is to be analyzed.

Any equipment, which is used for sampling, will be decontaminated prior to use. Decontamination will involve a detergent wash with a non-phosphate detergent followed by triple rinsing with distilled water. After decontamination, the sampling equipment will be wrapped in aluminum foil if not used immediately. Rinse water will be collected and managed as hazardous waste and will be treated via thermal treatment.

5.3 Waste Characterization - Residue from the Treatment of Listed Hazardous Waste

The ash residue from the burners used to treat listed hazardous waste will be assigned the waste codes applicable to the waste prior to thermal treatment. This waste will be shipped off-site for further treatment and disposal at a permitted disposal facility.

The Facility may evaluate these wastes to determine whether land ban disposal restrictions apply, and if so, whether further treatment is required to reach permissible disposal concentrations. In such cases, the subject ash will be analyzed for the constituent specified in Chapter 22 for the applicable waste code. All Sampling protocol and analytical methods, including QA/QC requirements, will be as specified in Section 5.2 above.

This section specifies the parameters for which each waste will be analyzed and the rationale for the selection of these parameters, in compliance with LAC 33:V.1519.B.1.

5.4 Waste Characterization – Rainwater and Rinse Water

Rainwater and rinse water collected from secondary containment areas will be sampled before each discharge or off-site shipment and analyzed for the analytes and by the SW-846, latest edition methods listed on Table 1. The rainwater or rinsewater will be stored less than

ninety (90) days prior to disposal, shipment offsite or discharged on-site, depending on the analytical results.

6.0 PROCESS OPERATIONS

Materials management processes at the facility include the following:

- Waste receipt;
- Storage;
- Preparation;
- Thermal Treatment by Open Detonation/Open Burning
- Ash management

A process flow diagram is included as Exhibit H. Also included as Exhibit I is a Materials Management Areas drawing. The process units are described in detail in Part 2 of the permit application for the facility. A summary of the design and capabilities of each unit is included below.

Waste delivery is scheduled in advance. Upon arrival, the shipping papers are inspected to ensure all wastes have approved profiles. No wastes are accepted without an approved profile that describes the chemical and physical characteristics. The waste is placed into storage units. The appropriate storage unit is selected based on existing capacity, chemical compatibility, ATF segregation requirements and whether free liquids are present. During unloading the containers are inspected to visually confirm the waste matches the manifested and profiled material. They are also counted to verify manifested amounts are received. Any discrepancy in material type or count is considered an off-spec. An electronic inventory system is used to track profiles, transportation, inventory and process activity information. All containers are assigned a unique bar code that is used to track inventory and process activity while on-site.

There are ten storage magazines that measure 10 feet by 20 feet in area and 8 feet high. The interior roof, doors, floors, and walls are lined with hardwood paneling. Vents are installed to permit proper ventilation and to prevent the build-up of extreme heat or pressure. The ventilation openings are screened. The openings are turned downward to prevent rainfall from entering. In addition, the screens prevent the entry of debris, insects, reptiles, small mammals, or other objects. The magazines are grounded to prevent the occurrence of an accidental fire or explosion from a lightning strike. The doors of the magazines are double locked with 5 tumbler locks that are covered with steel hoods. A covered truck staging area is adjacent to the entrance of three of the storage magazines that are labeled as Nos. 8, 9, and 10. The secondary containment at the truck staging area will contain any spills of liquids that may occur during transfer.

Operations will use the site's inventory system to plan daily OB/OD activities. Charges are prepared to ensure no more than 1,500 pounds net explosive weight (NEW) per hour is processed.

Some wastes such as shaped charges and projectiles have a metal outer casing that must be cut open to expose the inner reactive material. Other materials may require perforation, opening or size reduction. These activities are performed in the preparation building or on the burn pad.

The preparation building is supplied with electric power to operate the drill press and band saw used for preparation activities. All electrical switches, motors, controls, and lights conform to the requirements of Class II, Division 2 of the National Electric Code.

A container storage area is located at the rear of the preparation building. This area measures 18 feet wide by 60 feet long in plan with a 6" high berm to provide secondary containment. Generally, the only hazardous waste stored here will be the minimal amounts of ash collected from the treatment of listed wastes (i.e. EPA waste codes F, P, K, or U codes) or ash that contains a characteristic waste code. Wastes not regulated under ATF rules may be stored in this area as well.

The thermal treatment area is constructed on a 700' by 130' reinforced concrete slab (6" thick). The thermal treatment units consist of twenty (20) concrete curbed treatment pads atop the slab, each equipped with an interchangeable burner assembly. The burner assemblies consist either of an open steel pan or a steel-lined concrete burn chamber. The open steel pans are constructed of 3/16-inch (minimum) steel with eight-inch high sidewalls. The concrete burn chambers are constructed of 48-inch (inside diameter) reinforced concrete pipe. They are three feet in length, and equipped with a 14-gauge steel cover plate. Each of the treatment units is equipped with a retractable roof structure to prevent rainfall accumulation. After each burn is completed, the burner is allowed to cool for approximately 40 minutes or as needed to handle it safely. Residue is collected and containerized. These containers are stored on-site pending characterization and shipment offsite.

Drawings for these areas have previously been submitted and can be found in Part II of the permit application.

7.0 SAMPLING, ANALYSIS, QA/QC

In accordance with LAC 33:V:1519 and Condition II.E.9 of this permit, the Facility will conform to the following sampling, analysis and QA/QC requirements.

7.1 Waste Sampling

As described in Section 4.0, incoming waste will not be sampled and analyzed due to health and safety concerns. These wastes will be visually inspected to ensure the waste is conforming. The facility will sample site generated wastes (ash) and water. Sampling QA/QC will be followed as described in this section.

7.2 Sampling Methods

The methods and equipment used for sampling vary with the form and consistency of the waste to be sampled. The appropriate representative sampling techniques, devices, and containers are selected from the EPA document, "Test Methods for Evaluating Solid Wastes" (SW-846, latest edition) or "American Society for Testing and Materials" (ASTM) methods or Appendix I of 40 CFR part 261.

In order to determine the physical and chemical characteristics of a waste, a representative sample is needed. A representative sample is defined as a sample exhibiting average properties of the whole waste.

7.3 Traceability

Clean Harbors Colfax follows sample traceability for all internal sampling. This involves the documentation of procedures so that a set of data can be traced to the person performing the sampling, and then to the waste itself. All samples receive a unique sample identification number to facilitate this process.

7.4 Sampling Personnel

Sampling is performed by specially trained operations personnel. The General Manager or designee trains sampling personnel and observes their techniques periodically to ensure a thorough understanding of sample collection, storage, and transportation practices.

7.5 Sample Labels

Sample labels are necessary to provide identification of samples. The labels are affixed to the containers prior to or at the time of sampling. The labels are filled out at the time of collection and contain the following information:

- sample identification
- place of collection
- date and time of collection
- person sampling

7.6 Log Book

All information pertaining to sampling is recorded in a log-book, inspection or receiving report, or electronically. This record includes the following information:

- location of sampling point
- volume of sample taken
- date and time of collection
- sample identification number
- person sampling
- comments or observations
- sampling methodology
- number of samples and disposition

Sampling situations can vary widely; however, sufficient information is recorded to allow someone to reconstruct the sampling conditions without reliance on the collector's memory.

7.7 Sample Preservation

All samples are preserved in accordance with the parameter to be measured, as specified by the analytical method for that parameter. For sample preservation, specific procedures are found in the subcontract laboratory Quality Assurance Plan.

7.8 Sampling of Containers

The term "container" refers to receptacles designed for transporting materials, e.g., drums and other small receptacles as opposed to stationary tanks. This section addresses sampling of non-bulk containers. Sampling of bulk materials in large containers such as rolloffs is addressed in section 7.9. COLIWASAs, tubes, shovels, drum thieves, and triers are the devices used to sample containers.

Samples are taken from locations displaced both vertically and horizontally throughout the waste. For liquids (or liquids with precipitated solids), the sampling person uses a COLIWASA or equivalent. The sampling device is inserted into the container from the top and is pushed down slowly until the bottom of the container is reached. The device is sealed to retain the contents. The contents of the sampling device are then transferred to a polyethylene or glass bottle, which is labeled with waste identification information. The sampling device may also be stoppered at both ends, wiped dry with a disposable cloth, and then transferred to the lab for analysis.

A trier or thief is used to sample containers that are solid in nature. These containers are generally filled with dirt and sludges. Several areas from the container are sampled and composited into a jar in order to ensure a representative sample. The sampling person

removes a sample that uniformly represents the waste composition of the container, i.e., all layers and phases are represented in the sample.

7.9 Sampling of Bulk Materials

Where sampling of bulk containers is required, each bulk container will be sampled as described below.

Bulk solids in rolloffs or end dumps are sampled at two locations in the waste container. A trier, thief or shovel is used in order to draw a sample from as deep a cross section as possible at each location. The samples are composited together so that there is one sample, which represents that particular bulk solids shipment.

7.10 Analytical Test Methods

Clean Harbors Colfax will send samples to be analyzed off-site to a subcontract laboratory. The subcontract laboratory will be accredited by the Louisiana Environmental Laboratory Accreditation Program (LELAP) and as such will follow their QA/QC plan. A list of analytes based on a profile constituent review for the past 2 year's waste receipts is provided on Table 1. These analytes are listed in LAC 33:V.2299, Table 7. These analytes have also been segregated by the SW-846, latest edition analytical method.

An annual certification will be provided as specified in LAC 33:V:513 indicating that any commercial laboratory providing analytical results required by this permit is accredited by the Louisiana Environmental Laboratory Accreditation Program (LELAP). Documentation of accreditation will be submitted to LDEQ.

If the laboratory utilized to analyze samples per this Waste Analysis Plan is changed, the Louisiana Department of Environmental Quality will be notified, per the requirements of permit condition III.C.2.e.2. Information regarding the laboratory currently in use is included as Exhibit J.

TABLE 1
LIST OF ANALYTES SW-846, LATEST EDITION ANALYTICAL METHODS
RESIDUES, RAINWATERS AND RINSEWATERS
CLEAN HARBOR COLFAX, LLC FACILITY
WASTE ANALYSIS PLAN

Residues (Ash)			Screening Standard for Soil		
Method 8260B Volatiles- TCL 4.2	PQL/EQL/RL* (ug/kg)	MDL (ug/kg)	SSni (ug/kg)	SSi (ug/kg)	SSGW (ug/kg)
Acetone	20	5.38	1.7E+05	1.4E+06	1.5E+03
Benzene	5	0.47	1.5E+03	3.1E+03	5.1E+01
Bromobenzene	5	0.49	NL	NL	NL
Bromochloromethane	5	0.30	NL	NL	NL
Bromodichloromethane	5	0.22	1.8E+03	4.2E+03	9.2E+02
Bromoform	5	0.23	4.8E+04	1.8E+05	1.8E+03
Bromomethane	10	0.50	4.3E+02	3.0E+03	4.0E+01
2-Butanone (MEK)	10	1.83	5.9E+05	4.4E+06	5.0E+03
n-Butylbenzene	5	0.56	NL	NL	NL
sec-Butylbenzene	5	0.77	NL	NL	NL
tert-Butylbenzene	5	0.50	NL	NL	NL
Carbon disulfide	5	0.42	NL	NL	NL
Carbon tetrachloride	5	0.63	1.8E+02	1.1E+03	1.1E+02
Chlorobenzene	5	0.54	1.7E+04	1.2E+05	3.0E+03
Dibromochloromethane	5	0.57	2.2E+03	5.4E+03	1.0E+03
Chloroethane	10	0.89	4.1E+03	8.2E+03	3.5E+01
Chloroform	10	0.29	4.4E+01	3.0E+02	9.0E+02
Chloromethane	10	0.77	3.5E+03	7.3E+03	1.0E+02
2-Chlorotoluene	5	0.51	NL	NL	NL
4-Chlorotoluene	5	0.78	NL	NL	NL
1,2-Dibromo-3-chloropropane	10	0.60	1.8E+02	1.6E+03	1.0E+01
1,2-Dibromoethane (EDB)	5	0.52	NL	NL	NL
Dibromomethane	5	0.84	NL	NL	NL
1,2-Dichlorobenzene	5	0.45	9.9E+04	3.8E+05	2.9E+04
1,3-Dichlorobenzene	5	0.48	2.1E+03	1.8E+04	2.1E+03
1,4-Dichlorobenzene	5	0.78	6.7E+03	1.6E+04	5.7E+03
1,4 Dichloro-2-butene	5	1.05	NL	NL	NL
Dichlorodifluoromethane	10	0.52	NL	NL	NL
1,1-Dichloroethane	5	0.21	6.6E+04	4.7E+05	7.5E+03
1,2-Dichloroethane	5	0.70	8.2E+02	1.8E+03	3.5E+01
cis-1,2-Dichloroethene	2.5	0.56	4.8E+03	3.4E+04	4.9E+02
trans-1,2-Dichloroethene	2.5	0.39	6.9E+03	4.8E+04	7.7E+02
1,1-Dichloroethene	5	0.59	1.3E+04	9.1E+04	8.5E+01
1,2-Dichloroethene	5	0.39	NL	NL	NL
1,2-Dichloropropane	5	0.55	6.9E+02	1.8E+03	4.2E+01
1,3-Dichloropropane	5	0.51	3.1E+03	1.0E+04	4.0E+01
2,2-Dichloropropane	5	0.44	NL	NL	NL
cis-1,3-Dichloropropene	5	1.29	NL	NL	NL
trans-1,3-Dichloropropene	5	0.67	NL	NL	NL
1,1-Dichloropropene	5	0.54	NL	NL	NL
Ethanol	600	190	NL	NL	NL
Ethylbenzene	5	0.67	1.6E+05	2.3E+05	1.9E+04
Ethyl methacrylate	5	0.60	NL	NL	NL
Hexachlorobutadiene	5	0.55	8.2E+02	8.6E+03	5.5E+03
2-Hexanone	20	4.89	NL	NL	NL
Iodomethane	5	0.44	NL	NL	NL
Isopropylbenzene	5	0.59	NL	NL	NL
4-Isopropyltoluene	5	0.49	NL	NL	NL
Methylene chloride	5	0.75	1.9E+04	4.4E+04	1.7E+01
4-Methyl-2-pentanone	20	4.36	NL	NL	NL
Methyl tert-butyl ether	20	0.34	6.5E+05	4.7E+06	7.7E+01
Naphthalene	5	0.63	6.2E+03	4.3E+04	1.5E+03

TABLE 1
LIST OF ANALYTES SW-846, LATEST EDITION ANALYTICAL METHODS
RESIDUES, RAINWATERS AND RINSEWATERS
CLEAN HARBOR COLFAX, LLC FACILITY
WASTE ANALYSIS PLAN

Residues (Ash)			Screening Standard for Soil		
Method 8260B Volatiles-TCL 4.2	PQL/EQL/RL* (ug/kg)	MDL (ug/kg)	SSni (ug/kg)	SSi (ug/kg)	SSGW (ug/kg)
n-Propylbenzene	5	0.58	NL	NL	NL
Styrene	5	0.63	5.0E+05	1.7E+06	1.1E+04
1,1,1,2-Tetrachloroethane	5	0.56	2.7E+03	5.9E+03	4.6E+01
1,1,2,2-Tetrachloroethane	5	0.61	8.1E+02	2.0E+03	6.0E+00
Tetrachloroethene	5	0.59	8.3E+03	3.5E+04	1.8E+02
Toluene	5	0.69	6.8E+04	4.7E+05	2.0E+04
1,2,3-Trichlorobenzene	5	0.75	NL	NL	NL
1,2,4-Trichlorobenzene	5	0.73	6.6E+04	1.2E+06	1.4E+04
1,1,1-Trichloroethane	5	0.52	8.2E+04	7.0E+05	4.0E+03
1,1,2-Trichloroethane	5	0.88	1.9E+03	4.3E+03	5.8E+01
Trichloroethene	5	0.23	1.0E+02	2.1E+02	7.3E+01
Trichlorofluoromethane	10	1.04	3.8E+04	2.6E+05	3.7E+04
1,2,3-Trichloropopane	5	0.81	NL	NL	NL
1,2,4-Trimethylbenzene	5	0.58	NL	NL	NL
1,3,5-Trimethylbenzene	5	0.57	NL	NL	NL
Vinyl acetate	10	1.07	NL	NL	NL
Vinyl chloride	5	1.34	2.4E+02	7.9E+02	1.3E+01
Xylenes (total)	3.5	0.61	1.8E+04	1.2E+05	1.5E+05
Method 8270C Semi-Volatiles	PQL/EQL/RL* (ug/kg)	MDL (ug/kg)			
Dibutyl phthalate	330	29	NL	NL	NL
Diethyl phthalate	660	26	6.70E+05	6.70E+05	3.60E+05
Diphenylamine	330	44	NL	NL	NL
Hexachlorobenzene	330	29	3.40E+02	2.00E+03	9.60E+03
Hexachloethane	330	21.3	5.20E+03	6.80E+04	2.20E+03
Pyridine	170	84	NL	NL	NL
Method 8330 Explosives	PQL/EQL/RL* (mg/kg)	MDL (mg/kg)			
2-Amino-4,6-dinitrotoluene	0.25	0.0455	NL	NL	NL
4-Amino-2,6-dinitrotoluene	0.25	0.0391	NL	NL	NL
1,3-Dinitrobenzene	0.25	0.0611	4.5E+02	5.0E+03	2.5E+02
2,4-Dinitrotoluene	0.25	0.0498	8.9E+03	9.8E+04	1.0E+03
2,6-Dinitrotoluene	0.25	0.0542	4.3E+03	4.6E+04	3.9E+02
HMX	0.25	0.0776	NL	NL	NL
Nitrobenzene	0.25	0.0614	2.2E+03	2.5E+04	3.3E+02
2-Nitrotoluene	0.25	0.0841	NL	NL	NL
3-Nitrotoluene	0.50	0.0548	NL	NL	NL
4-Nitrotoluene	0.40	0.109	NL	NL	NL
RDX	0.25	0.0854	NL	NL	NL
Tetryl	0.50	0.0548	NL	NL	NL
1,3,5-Trinitrobenzene	0.25	0.0712	NL	NL	NL
2,4,6-Trinitrotoluene	0.25	0.0578	NL	NL	NL

TABLE 1
LIST OF ANALYTES SW-846, LATEST EDITION ANALYTICAL METHODS
RESIDUES, RAINWATERS AND RINSEWATERS
CLEAN HARBOR COLFAX, LLC FACILITY
WASTE ANALYSIS PLAN

Residues (Ash)			Screening Standard for Soil		
Method 7471A Mercury	PQL/EQL/RL* (ug/kg)	MDL (ug/kg)	SSni (ug/kg)	SSi (ug/kg)	SSGW (ug/kg)
Mercury	17	5.53	2.3E+03	6.1E+04	4.0E+03
Method 6010B ICPMS Metals	(mg/kg)	(mg/kg)			
Aluminum	10	4.9	NL	NL	NL
Antimony	1.5	0.38	3.1E+03	8.2E+04	1.2E+04
Arsenic	2.0	0.66	1.2E+04	1.2E+04	1.0E+05
Barium	1.0	0.24	5.5E+05	1.4E+07	2.0E+06
Beryllium	0.5	0.15	1.6E+04	4.1E+05	8.0E+03
Boron	10	0.98	NL	NL	NL
Cadmium	0.5	0.041	3.9E+03	1.0E+05	2.0E+04
Calcium	50	14.1	NL	NL	NL
Chromium	1.5	0.4	1.2E+07	3.1E+08	1.0E+05
Copper	2.0	0.56	3.1E+05	8.2E+06	1.5E+06
Iron	15	3.8	NL	NL	NL
Lead	0.8	0.27	4.0E+05	1.4E+06	1.0E+05
Magnesium	20	3.7	NL	NL	NL
Molybdenum	2.0	0.26	NL	NL	NL
Nickel	4.0	0.24	1.6E+05	4.1E+06	1.5E+06
Potassium	300	41	NL	NL	NL
Selenium	1.3	0.86	3.9E+04	1.0E+06	2.0E+04
Silica	110	4.4	NL	NL	NL
Silicon	50	2.1	NL	NL	NL
Silver	1.0	0.16	3.9E+04	1.0E+06	1.0E+05
Sodium	500	59	NL	NL	NL
Strontium	1.0	0.064	NL	NL	NL
Thallium	1.2	0.65	5.5E+02	1.4E+04	4.0E+03
Tin	10	1.9	NL	NL	NL
Titanium	1.0	0.14	NL	NL	NL
Vanadium	2.0	0.62	5.5E+04	1.4E+06	5.2E+05
Zinc	3.0	1.0	2.3E+06	6.1E+07	2.8E+06

ug/kg = Micrograms per kilogram.

mg/kg = Miligrams per kilogram.

SSni = LDEQ RECAP Non-Industrial Screening Standard.

SSi = LDEQ RECAP Industrial Screening Standard.

SSGW = LDEQ Soil Concentration Protective of Groundwater.

NL = None listed. If detected will calculate in accordance with RECAP.

* TestAmerica's PQLs are determined as a function of each compound's MDL. As MDLs have the possibility to change based on method-required MDL studies, PQLs then also have the capacity to change based on the most current MDL studies.

TABLE 1
LIST OF ANALYTES & SW-846, LATEST EDITION ANALYTICAL METHODS
RESIDUES, RAINWATERS AND RINSEWATERS
CLEAN HARBOR COLFAX, LLC FACILITY
WASTE ANALYSIS PLAN

Rainwaters & Rinsewaters			Screening Standards for Groundwater† (ug/l)
Method 8260B Volatiles-TCL 4.2	PQL/EQL/RL* (ug/l)	MDL (ug/l)	
Acetone	100	1.9	100
Benzene	5	0.16	5
Bromobenzene	5	0.17	NL
Bromochloromethane	5	0.10	NL
Bromodichloromethane	5	0.17	100
Bromoform	5	0.19	100
Bromomethane	10	0.21	10
2-Butanone (MEK)	100	1.83	190
n-Butylbenzene	5	0.14	NL
sec-Butylbenzene	5	0.17	NL
tert-Butylbenzene	5	0.16	NL
Carbon disulfide	5	0.45	100
Carbon tetrachloride	5	0.19	5
Chlorobenzene	5	0.17	100
Dibromochloromethane	5	0.17	100
Chloroethane	10	0.41	10
Chloroform	5	0.16	100
Chloromethane	10	0.30	10
2-Chlorotoluene	5	0.17	NL
4-Chlorotoluene	5	0.17	NL
1,2-Dibromo-3-chloropropane	5	1.50	0.2
1,2-Dibromoethane (EDB)	5	0.18	NL
Dibromomethane	5	0.17	NL
1,2-Dichlorobenzene	5	0.13	600
1,3-Dichlorobenzene	5	0.16	10
1,4-Dichlorobenzene	5	0.16	75
1,4 Dichlor-2-butene	5	0.90	NL
Dichlorodifluoromethane	5	0.31	NL
1,1-Dichloroethane	5	0.16	81
1,2-Dichloroethane	5	0.13	5
cis-1,2-Dichloroethene	5	0.15	70
trans-1,2-Dichloroethene	5	0.15	100
1,1-Dichloroethene	5	0.14	7
1,2-Dichloroethene	5	0.15	NL
1,2-Dichloropropane	5	0.13	5
1,3-Dichloropropane	5	0.15	NL
2,2-Dichloropropane	5	0.2	NL
cis-1,3-Dichloropropene	5	0.16	NL
trans-1,3-Dichloropropene	5	0.19	NL
1,1-Dichloropropene	5	0.15	NL
Ethanol	300	94	NL
Ethylbenzene	5	0.16	700
Ethyl methacrylate	5	0.86	NL
Hexachlorobutadiene	5	0.12	0.73
2-Hexanone	50	1.4	NL
Iodomethane	5	0.23	NL
Isopropylbenzene	5	0.19	NL
4-Isopropyltoluene	5	0.17	NL
Methylene chloride	5	0.32	5
4-Methyl-2-pentanone	50	1.04	NL
Methyl tert-butyl ether	5	0.25	20
Naphthalene	5	0.22	10

TABLE 1
LIST OF ANALYTES & SW-846, LATEST EDITION ANALYTICAL METHODS
RESIDUES, RAINWATERS AND RINSEWATERS
CLEAN HARBOR COLFAX, LLC FACILITY
WASTE ANALYSIS PLAN

Rainwaters & Rinsewaters			Screening Standards for Groundwater† (ug/l)
Method 8260B Volatiles-TCL 4.2	PQL/EQL/RL* (ug/l)	MDL (ug/l)	
n-Propylbenzene	5	0.16	NL
Styrene	5	0.17	100
1,1,1,2-Tetrachloroethane	5	0.17	5
1,1,2,2-Tetrachloroethane	5	0.2	0.5
Tetrachloroethene	5	0.2	5
Toluene	5	0.17	1,000
1,2,3-Trichlorobenzene	5	0.18	NL
1,2,4-Trichlorobenzene	5	0.32	70
1,1,1-Trichloroethane	5	0.16	200
1,1,2-Trichloroethane	5	0.32	5
Trichloroethene	5	0.16	5
Trichlorofluoromethane	5	0.29	130
1,2,3-Trichloropopane	5	0.77	NL
1,2,4-Trimethylbenzene	5	0.14	NL
1,3,5-Trimethylbenzene	5	0.14	NL
Vinyl acetate	5	0.94	NL
Vinyl chloride	10	0.4	2
Xylenes (total)	5	0.19	10,000
Method 8270C Semi-Volatiles	PQL/EQL/RL* (ug/l)	MDL (ug/l)	
Dibutyl phthalate	10	1.16	NL
Diethyl phthalate	10	0.38	2900
Diphenylamine	10	1.06	NL
Hexachlorobenzene	10	0.66	1
Hexachloethane	10	0.46	10
Pyridine	5	0.87	NL
Method 8330 Explosives	PQL/EQL/RL* (ug/l)	MDL (ug/l)	
2-Amino-4,6-dinitrotoluene	0.2	0.0507	NL
4-Amino-2,6-dinitrotoluene	0.2	0.0577	NL
1,3-Dinitrobenzene	0.4	0.0887	10
2,4-Dinitrotoluene	0.4	0.0838	10
2,6-Dinitrotoluene	0.2	0.0645	10
HMX	0.4	0.0876	NL
Nitrobenzene	0.4	0.091	1.9
2-Nitrotoluene	0.4	0.0855	NL
3-Nitrotoluene	0.40	0.0834	NL
4-Nitrotoluene	1.00	0.2	NL
RDX	0.2	0.0523	NL
Tetryl	0.20	0.0793	NL
1,3,5-Trinitrobenzene	1	0.2	NL
2,4,6-Trinitrotoluene	0.4	0.0724	NL

TABLE 1
 LIST OF ANALYTES & SW-846, LATEST EDITION ANALYTICAL METHODS
 RESIDUES, RAINWATERS AND RINSEWATERS
 CLEAN HARBOR COLFAX, LLC FACILITY
 WASTE ANALYSIS PLAN

Rainwaters & Rinsewaters			Screening Standards for Groundwater† (ug/l)
Method 7470A Mercury	PQL/EQL/RL* (ug/l)	MDL (ug/l)	
Mercury	0.2	0.0272	2
Method 6010B ICPMS Metals	(ug/l)	(ug/l)	
Aluminum	100	18.0	NL
Antimony	10.0	3.14	6
Arsenic	15.0	4.41	10
Barium	10	1.04	2,000
Beryllium	1	0.474	4
Boron	100	5.93	NL
Cadmium	5	0.452	5
Calcium	200	34.5	NL
Chromium	10.0	2.56	100
Copper	15	4.49	1,300
Iron	100	22.0	NL
Lead	9.0	2.61	15
Magnesium	200.0	42.8	NL
Molybdenum	20.0	5.34	NL
Nickel	40	7.78	73
Potassium	3000	237	NL
Selenium	15	4.86	50
Silica	1100	128	NL
Silicon	500.0	63.4	NL
Silver	10	2.78	18
Sodium	1000.0	91.6	NL
Strontium	10	0.300	NL
Thallium	15	4.91	2
Tin	100.0	5.83	NL
Titanium	10	1.01	NL
Vanadium	10.0	2.47	26
Zinc	20.0	4.5	1,100

ug/l = Micrograms per liter.

† = LDEQ RECAP Groundwater Screening Standard.

NL = None listed. If detected will calculate in accordance with RECAP.

* TestAmerica's PQLs are determined as a function of each compound's MDL. As MDLs have the possibility to change based on method-required MDL studies, PQLs then also have the capacity to change based on the most current MDL studies.

EXHIBIT A

WAP CERTIFICATION

Clean Harbors Colfax, LLC

LAD 0981055791, AI 32096

WASTE ANALYSIS PLAN

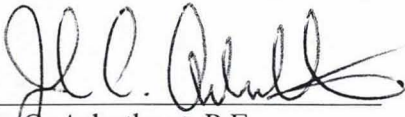
Clean Harbors Colfax, LLC

LAD 0981055791, AI #32096

CERTIFICATION

In accordance with Section III.C.3.c. of the RCRA Operating Permit, I have reviewed the subject Waste Analysis Plan, and certification by the Permittee, and find that it meets the requirements of LAC 33:V.1519 and Sections III.C.1, C.2, and C.3 of the Final Hazardous Waste Operating Renewal Permit LAD 981055791-RN-OP-1.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



John C. Arbuthnot, P.E.
Louisiana Registration No. 17688
Senior Remediation Manager
Clean Harbors Environmental Services, Inc.
On Behalf of
Clean Harbors Colfax, LLC



06/19/2015
Date

EXHIBIT B

WASTE PROFILE SHEET

Clean Harbors Colfax, LLC

LAD 0981055791, AI 32096



WASTE MATERIAL PROFILE SHEET

Clean Harbors Profile No. _____

A. GENERAL INFORMATION

GENERATOR EPA ID #/REGISTRATION #
 GENERATOR CODE (Assigned by Clean Harbors)
 ADDRESS
 CUSTOMER CODE (Assigned by Clean Harbors)
 ADDRESS

GENERATOR NAME:
 CITY STATE/PROVINCE ZIP/POSTAL CODE
 PHONE:
 CUSTOMER NAME:
 CITY STATE/PROVINCE ZIP/POSTAL CODE

B. WASTE DESCRIPTION

WASTE DESCRIPTION: _____

PROCESS GENERATING WASTE: _____

IS THIS WASTE CONTAINED IN SMALL PACKAGING CONTAINED WITHIN A LARGER SHIPPING CONTAINER ? _____

C. PHYSICAL PROPERTIES (at 25C or 77F)

PHYSICAL STATE SOLID WITHOUT FREE LIQUID POWDER MONOLITHIC SOLID LIQUID WITH NO SOLIDS LIQUID/SOLID MIXTURE % FREE LIQUID % SETTLED SOLID % TOTAL SUSPENDED SOLID SLUDGE GAS/AEROSOL	NUMBER OF PHASES/LAYERS			VISCOSITY (If liquid present) 1 - 100 (e.g. Water) 101 - 500 (e.g. Motor Oil) 501 - 10,000 (e.g. Molasses) > 10,000	COLOR
	1	2	3		
	TOP	0.00			
	MIDDLE	0.00			
	BOTTOM	0.00			
	ODOR		BOILING POINT °F (°C)	MELTING POINT °F (°C)	TOTAL ORGANIC CARBON
	NONE	<= 95 (<=35)			
	MILD	95 - 100 (35-38)	140-200 (60-93)	1-9%	
	STRONG	101 - 129 (38-54)	> 200 (>93)	>= 10%	
	Describe:		>= 130 (>54)		
FLASH POINT °F (°C)	pH	SPECIFIC GRAVITY	ASH		BTU/LB (MJ/kg)
< 73 (<23)	<= 2	< 0.8 (e.g. Gasoline)	< 0.1	> 20	< 2,000 (<4.6)
73 - 100 (23-38)	2.1 - 6.9	0.8-1.0 (e.g. Ethanol)	0.1 - 1.0	Unknown	2,000-5,000 (4.6-11.6)
101 -140 (38-60)	7 (Neutral)	1.0 (e.g. Water)	1.1 - 5.0		5,000-10,000 (11.6-23.2)
141 -200 (60-93)	7.1 - 12.4	1.0-1.2 (e.g. Antifreeze)	5.1 - 20.0		> 10,000 (>23.2)
> 200 (>93)	>= 12.5	> 1.2 (e.g. Methylene Chloride)			Actual:

D. COMPOSITION (List the complete composition of the waste, include any inert components and/or debris. Ranges for individual components are acceptable. If a trade name is used, please supply an MSDS. Please do not use abbreviations.)

CHEMICAL	MIN	MAX	UOM
DOES THIS WASTE CONTAIN ANY HEAVY GAUGE METAL DEBRIS OR OTHER LARGE OBJECTS (EX., METAL PLATE OR PIPING >1/4" THICK OR >12" LONG, METAL REINFORCED HOSE >12" LONG, METAL WIRE >12" LONG, METAL VALVES, PIPE FITTINGS, CONCRETE REINFORCING BAR OR PIECES OF CONCRETE >3")?		YES	NO
If yes, describe, including dimensions:			
DOES THIS WASTE CONTAIN ANY METALS IN POWDERED OR OTHER FINELY DIVIDED FORM?		YES	NO
DOES THIS WASTE CONTAIN OR HAS IT CONTACTED ANY OF THE FOLLOWING; ANIMAL WASTES, HUMAN BLOOD, BLOOD PRODUCTS, BODY FLUIDS, MICROBIOLOGICAL WASTE, PATHOLOGICAL WASTE, HUMAN OR ANIMAL DERIVED SERUMS OR PROTEINS OR ANY OTHER POTENTIALLY INFECTIOUS MATERIAL?		YES	NO
I acknowledge that this waste material is neither infectious nor does it contain any organism known to be a threat to human health. This certification is based on my knowledge of the material. Select the answer below that applies:			
The waste was never exposed to potentially infectious material.		YES	NO
Chemical disinfection or some other form of sterilization has been applied to the waste.		YES	NO
I ACKNOWLEDGE THAT THIS PROFILE MEETS THE CLEAN HARBORS BATTERY PACKAGING REQUIREMENTS.		YES	NO
I ACKNOWLEDGE THAT MY FRIABLE ASBESTOS WASTE IS DOUBLE BAGGED AND WETTED.		YES	NO
SPECIFY THE SOURCE CODE ASSOCIATED WITH THE WASTE.	SPECIFY THE FORM CODE ASSOCIATED WITH THE WASTE.		



F. REGULATORY STATUS

YES NO USEPA HAZARDOUS WASTE? _____

YES NO DO ANY STATE WASTE CODES APPLY?
 Texas Waste Code _____

YES NO DO ANY CANADIAN PROVINCIAL WASTE CODES APPLY? _____

YES NO IS THIS WASTE PROHIBITED FROM LAND DISPOSAL WITHOUT FURTHER TREATMENT PER 40 CFR PART 268?
 LDR CATEGORY: _____
 VARIANCE INFO: _____

YES NO IS THIS A UNIVERSAL WASTE?

YES NO IS THE GENERATOR OF THE WASTE CLASSIFIED AS CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR (CESQG)?

YES NO IS THIS MATERIAL GOING TO BE MANAGED AS A RCRA EXEMPT COMMERCIAL PRODUCT, WHICH IS FUEL (40 CFR 261.2 (C)(2)(II))?

YES NO DOES TREATMENT OF THIS WASTE GENERATE A F006 OR F019 SLUDGE?

YES NO IS THIS WASTE STREAM SUBJECT TO THE INORGANIC METAL BEARING WASTE PROHIBITION FOUND AT 40 CFR 268.3(C)?

YES NO DOES THIS WASTE CONTAIN VOC'S IN CONCENTRATIONS >=500 PPM?

YES NO DOES THE WASTE CONTAIN GREATER THAN 20% OF ORGANIC CONSTITUENTS WITH A VAPOR PRESSURE >= .3KPA (.044 PSIA)?

YES NO DOES THIS WASTE CONTAIN AN ORGANIC CONSTITUENT WHICH IN ITS PURE FORM HAS A VAPOR PRESSURE > 77 KPA (11.2 PSIA)?

YES NO IS THIS CERCLA REGULATED (SUPERFUND) WASTE ?

YES NO IS THE WASTE SUBJECT TO ONE OF THE FOLLOWING NESHAP RULES?
 Hazardous Organic NESHAP (HON) rule (subpart G) Pharmaceuticals production (subpart GGG)

YES NO IF THIS IS A US EPA HAZARDOUS WASTE, DOES THIS WASTE STREAM CONTAIN BENZENE?
 YES NO Does the waste stream come from a facility with one of the SIC codes listed under benzene NESHAP or is this waste regulated under the benzene NESHAP rules because the original source of the waste is from a chemical manufacturing, coke by-product recovery, or petroleum refinery process?
 YES NO Is the generating source of this waste stream a facility with Total Annual Benzene (TAB) >10 Mg/year?
 What is the TAB quantity for your facility? _____ Megagram/year (1 Mg = 2,200 lbs)
 The basis for this determination is: Knowledge of the Waste Or Test Data Knowledge Testing
 Describe the knowledge : _____

G. DOT/TDG INFORMATION

DOT/TDG PROPER SHIPPING NAME: _____

H. TRANSPORTATION REQUIREMENTS

ESTIMATED SHIPMENT FREQUENCY ONE TIME WEEKLY MONTHLY QUARTERLY YEARLY OTHER

CONTAINERIZED		BULK LIQUID	BULK SOLID		
0-0 CONTAINERS/SHIPMENT		GALLONS/SHIPMENT: 0 Min -0 Max	GAL.	SHIPMENT UOM:	TON YARD
STORAGE CAPACITY:				TONS/YARDS/SHIPMENT: 0 Min - 0 Max	
CONTAINER TYPE:					
CUBIC YARD BOX	PALLET				
TOTE TANK	DRUM				
OTHER:	DRUM SIZE:				

I. SPECIAL REQUEST

COMMENTS OR REQUESTS: _____

GENERATOR'S CERTIFICATION

I certify that I am authorized to execute this document as an authorized agent. I hereby certify that all information submitted in this and attached documents is correct to the best of my knowledge. I also certify that any samples submitted are representative of the actual waste. If Clean Harbors discovers a discrepancy during the approval process, Generator grants Clean Harbors the authority to amend the profile, as Clean Harbors deems necessary, to reflect the discrepancy.

AUTHORIZED SIGNATURE

NAME (PRINT)

TITLE

DATE



E. CONSTITUENTS

Are these values based on testing or knowledge? Knowledge Testing

If constituent concentrations are based on analytical testing, analysis must be provided. Please attach document(s) using the link on the Submit tab.

Please indicate which constituents below apply. Concentrations must be entered when applicable to assist in accurate review and expedited approval of your waste profile. Please note that the total regulated metals and other constituents sections require answers.

Table with columns: RCRA, REGULATED METALS, REGULATORY LEVEL (mg/l), TCLP mg/l, TOTAL, UOM, NOT APPLICABLE. Rows include ARSENIC, BARIUM, CADMIUM, CHROMIUM, LEAD, MERCURY, SELENIUM, SILVER, VOLATILE COMPOUNDS (BENZENE, CARBON TETRACHLORIDE, etc.), SEMI-VOLATILE COMPOUNDS (o-CRESOL, m-CRESOL, etc.), and PESTICIDES AND HERBICIDES (ENDRIN, LINDANE, etc.).

Table for HOCs and PCBs. HOCs: NONE, < 1000 PPM, >= 1000 PPM. PCBs: NONE, < 50 PPM, >=50 PPM. IF PCBs ARE PRESENT, IS THE WASTE REGULATED BY TSCA 40 CFR 761? YES NO

ADDITIONAL HAZARDS

DOES THIS WASTE HAVE ANY UNDISCLOSED HAZARDS OR PRIOR INCIDENTS ASSOCIATED WITH IT, WHICH COULD AFFECT THE WAY IT SHOULD BE HANDLED?

YES NO (If yes, explain)

CHOOSE ALL THAT APPLY

- DEA REGULATED SUBSTANCES EXPLOSIVE FUMING OSHA REGULATED CARCINOGENS
POLYMERIZABLE RADIOACTIVE REACTIVE MATERIAL NONE OF THE ABOVE

EXHIBIT C

WASTE CONSTITUENTS DETAIL REPORT

Clean Harbors Colfax, LLC

LAD 0981055791, AI 32096

Clean Harbors Colfax, LLC
Waste Constituents Report
01/01/2007 to 12/31/2007

Manifest_textbox6	Tracking_Constituents	Drum_Weight	Drum_Profile	Status	Minimum	Maximum	Incinerator_d
1/2/2007 000602644FLE	12233133 N-BUTYL ALCOHOL	214 LBS	CH64969	INCN	30%	30%	1/5/2007
1/2/2007 000602644FLE	12233133 NITROCELLULOSE	214 LBS	CH64969	INCN	70%	70%	1/5/2007
1/2/2007 000602644FLE	12233134 N-BUTYL ALCOHOL	214 LBS	CH64969	INCN	30%	30%	1/5/2007
1/2/2007 000602644FLE	12233134 NITROCELLULOSE	214 LBS	CH64969	INCN	70%	70%	1/5/2007
1/2/2007 000317976FLE	12355002 BARIUM CHROMATE	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355002 BLACK POWDER	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355002 DEBRIS	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355002 LEAD AZIDE	26 LBS	204111	INCN	0%	10%	1/5/2007
1/2/2007 000317976FLE	12355002 POTASSIUM PERCHL	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355002 SODIUM NITRATE	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355003 BARIUM CHROMATE	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355003 BLACK POWDER	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355003 DEBRIS	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355003 LEAD AZIDE	26 LBS	204111	INCN	0%	10%	1/5/2007
1/2/2007 000317976FLE	12355003 POTASSIUM PERCHL	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355003 SODIUM NITRATE	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355004 BARIUM CHROMATE	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355004 BLACK POWDER	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355004 DEBRIS	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355004 LEAD AZIDE	26 LBS	204111	INCN	0%	10%	1/5/2007
1/2/2007 000317976FLE	12355004 POTASSIUM PERCHL	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355004 SODIUM NITRATE	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355005 BARIUM CHROMATE	29 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355005 BLACK POWDER	29 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355005 DEBRIS	29 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355005 LEAD AZIDE	29 LBS	204111	INCN	0%	10%	1/5/2007
1/2/2007 000317976FLE	12355005 POTASSIUM PERCHL	29 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355005 SODIUM NITRATE	29 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355006 BARIUM CHROMATE	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355006 BLACK POWDER	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355006 DEBRIS	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355006 LEAD AZIDE	26 LBS	204111	INCN	0%	10%	1/5/2007
1/2/2007 000317976FLE	12355006 POTASSIUM PERCHL	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355006 SODIUM NITRATE	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355007 BARIUM CHROMATE	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355007 BLACK POWDER	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355007 DEBRIS	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355007 LEAD AZIDE	26 LBS	204111	INCN	0%	10%	1/5/2007
1/2/2007 000317976FLE	12355007 POTASSIUM PERCHL	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355007 SODIUM NITRATE	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355008 BARIUM CHROMATE	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355008 BLACK POWDER	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355008 DEBRIS	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355008 LEAD AZIDE	26 LBS	204111	INCN	0%	10%	1/5/2007
1/2/2007 000317976FLE	12355008 POTASSIUM PERCHL	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355008 SODIUM NITRATE	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355009 BARIUM CHROMATE	29 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355009 BLACK POWDER	29 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355009 DEBRIS	29 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355009 LEAD AZIDE	29 LBS	204111	INCN	0%	10%	1/5/2007
1/2/2007 000317976FLE	12355009 POTASSIUM PERCHL	29 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355009 SODIUM NITRATE	29 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355010 BARIUM CHROMATE	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355010 BLACK POWDER	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355010 DEBRIS	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355010 LEAD AZIDE	26 LBS	204111	INCN	0%	10%	1/5/2007
1/2/2007 000317976FLE	12355010 POTASSIUM PERCHL	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355010 SODIUM NITRATE	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355011 BARIUM CHROMATE	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355011 BLACK POWDER	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355011 DEBRIS	26 LBS	204111	INCN	0%	25%	1/5/2007
1/2/2007 000317976FLE	12355011 LEAD AZIDE	26 LBS	204111	INCN	0%	10%	1/5/2007

EXHIBIT D

WASTE TREATMENT STATISTICS REPORT

Clean Harbors Colfax, LLC

LAD 0981055791, AI 32096

CLEAN HARBORS COLFAX, LLC
COLFAX, LA # 63CF

WASTE TREATMENT STATISTICS REPORT

DATE: 6-17-15 TIME: 8:00 (a.m.) p.m.

AY#	Waste Class & Division	Waste Name	Gross Wt.	NEW	Prep. Time	Wind Speed MBH	Lightning (M/D)	Rain Fall (in)	Burn Time	Cool Time	Clean up Time	Comments
11	1.4G	Waste fireworks	25.75	.75	5min.	2.1	No	No	30min.	30min.	10min.	45345214
12												
13												
14												
15												
16			34.34	1.00								45345215
17												
18												
19												
20												
10												
sted												
aste												

Total N.E.W. 8.00
Gross = 274.67

Completed By: Joe Maruy

EXHIBIT E

INVENTORY REPORT

Clean Harbors Colfax, LLC

LAD 0981055791, AI 32096



Inventory Aging Detail Report

For CF As of 6/17/2015

Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
211 - 240													
223	41598136	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	28	LBS	A99X	A99X	YES	CH519278		
223	41598137	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	28	LBS	A99X	A99X	YES	CH519278		
223	41598138	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	28	LBS	A99X	A99X	YES	CH519278		
223	41598139	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	28	LBS	A99X	A99X	YES	CH519278		
223	41598140	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	28	LBS	A99X	A99X	YES	CH519278		
223	41598141	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	28	LBS	A99X	A99X	YES	CH519278		
223	41598142	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	28	LBS	A99X	A99X	YES	CH519278		
181 - 210													
210	41848890	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848891	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848892	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848893	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848894	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848895	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848896	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848897	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848898	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848899	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848900	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848901	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848902	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848903	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848904	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848905	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848906	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848907	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848908	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848909	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848910	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848911	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848912	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848913	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848914	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		



Inventory Aging Detail Report

For CF As of 6/17/2015

Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
210	41848915	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848916	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848918	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848919	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848920	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848921	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848922	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848923	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848924	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848925	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848926	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848927	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
210	41848929	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0693		
210	41848931	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0693		
151 - 180													
171	42493985	6/1/2015	Magazine 10	DE4024	De La Mare Engineering Inc	1	LBS	A99X	A99X	YES	CH535787		
171	42493986	6/1/2015	Magazine 10	DE4024	De La Mare Engineering Inc	1	LBS	A99X	A99X	YES	CH535793		
163	42598198	6/1/2015	Magazine 4	BA3808	Baker Atlas	1	LBS	A99X	A99X	YES	810100		
163	42598231	6/1/2015	Magazine 4	BA3808	Baker Atlas	1	LBS	A99X	A99X	YES	810092		
163	42598233	6/1/2015	Magazine 4	BA3808	Baker Atlas	1	LBS	A99X	A99X	YES	810092		
163	42598234	6/1/2015	Magazine 4	BA3808	Baker Atlas	1	LBS	A99X	A99X	YES	810092		
163	42598313	6/1/2015	Magazine 3	HI0776	Chemring Energetic Devices Inc	6	LBS	A99X	A99X	YES	HIS 016		
163	42598518	6/1/2015	Magazine 3	HA3824	Halliburton Energy Services	1	LBS	A99X	A99X	YES	CH527463		
163	42598576	6/1/2015	Magazine 3	HA3824	Halliburton Energy Services	1	LBS	A99X	A99X	YES	CH527466		
163	42598882	6/1/2015	Magazine 4	RO19281	Rockpile Energy Services	1	LBS	A99X	A99X	YES	832678		
163	42598923	6/1/2015	Magazine 3	RO19281	Rockpile Energy Services	1	LBS	A99X	A99X	YES	832690		
163	42599120	6/1/2015	Magazine 4	UN0682	University of California	2	LBS	A99X	A99X	YES	CH922175		
162	42674623	6/1/2015	Magazine 3	BA3808	Baker Atlas	1	LBS	A99X	A99X	YES	810094		
162	42674627	6/1/2015	Magazine 3	BA3808	Baker Atlas	1	LBS	A99X	A99X	YES	CH883814		
160	42710281	6/1/2015	Magazine 3	BA3118	Baker Atlas	1	LBS	A99X	A99X	YES	706067		
160	42710282	6/1/2015	Magazine 3	BA3118	Baker Atlas	1	LBS	A99X	A99X	YES	706067		
160	42710283	6/1/2015	Magazine 3	BA3118	Baker Atlas	1	LBS	A99X	A99X	YES	706067		
160	42710284	6/1/2015	Magazine 3	BA3118	Baker Atlas	1	LBS	A99X	A99X	YES	706067		
153	42836161	6/1/2015	Magazine 7	HI0787	Chemring Energetic Devices Inc	25	LBS	A99X	A99X	YES	HIS 025		



Inventory Aging Detail Report

For CF As of 6/17/2015

Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
153	42838221	6/1/2015	Magazine 9	BAE0161	Armtec Countermeasures Company	90	LBS	A99X	A99X	YES	209123		
153	42838222	6/1/2015	Magazine 9	BAE0161	Armtec Countermeasures Company	90	LBS	A99X	A99X	YES	209123		
153	42838223	6/1/2015	Magazine 9	BAE0161	Armtec Countermeasures Company	90	LBS	A99X	A99X	YES	209123		
153	42838224	6/1/2015	Magazine 9	BAE0161	Armtec Countermeasures Company	90	LBS	A99X	A99X	YES	209123		
153	42838225	6/1/2015	Magazine 9	BAE0161	Armtec Countermeasures Company	90	LBS	A99X	A99X	YES	209123		
121 - 150													
149	42887044	6/1/2015	Magazine 3	HAL1279	Halliburton Energy Services	1	LBS	A99X	A99X	YES	206059		
149	42887045	6/1/2015	Magazine 3	HAL1279	Halliburton Energy Services	1	LBS	A99X	A99X	YES	206059		
149	42887046	6/1/2015	Magazine 3	HAL1279	Halliburton Energy Services	1	LBS	A99X	A99X	YES	510081		
149	42887047	6/1/2015	Magazine 3	HAL1279	Halliburton Energy Services	1	LBS	A99X	A99X	YES	CH663589		
147	42930178	6/1/2015	Magazine 9	RE0669	Reynolds Systems Inc	9	LBS	A99X	A99X	YES	407008		
147	42930179	6/1/2015	Magazine 9	RE0669	Reynolds Systems Inc	6	LBS	A99X	A99X	YES	407009		
141	43021216	6/1/2015	Magazine 7	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH526107		
141	43021229	6/1/2015	Magazine 7	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH896761		
141	43021241	6/1/2015	Magazine 7	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH550606		
141	43021245	6/1/2015	Magazine 7	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH845493		
141	43021248	6/1/2015	Magazine 7	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH590654		
141	43021250	6/1/2015	Magazine 7	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH513650		
141	43021257	6/1/2015	Magazine 7	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH904143		
141	43021258	6/1/2015	Magazine 7	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH743718		
141	43021261	6/1/2015	Magazine 7	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH909874		
140	40496375	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
140	40496376	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
140	40896555	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
140	40896566	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
140	42156422	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	2	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
140	42156423	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	2	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
140	42156424	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	2	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
140	42156427	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	2	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
140	42175023	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	2	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
140	42175024	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	2	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
140	42175029	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
140	42175030	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
140	42175031	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
140	42175032	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
140	42197067	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
140	42197068	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
140	43042957	6/1/2015	Magazine 4	HAL1254	Halliburton Energy Services	1	LBS	A99X	A99X	YES	CH707984		
140	43042958	6/1/2015	Magazine 4	HAL1254	Halliburton Energy Services	1	LBS	A99X	A99X	YES	603050		
140	43042961	6/1/2015	Magazine 4	HAL1254	Halliburton Energy Services	6	LBS	A99X	A99X	YES	011028		
140	43042962	6/1/2015	Magazine 4	HAL1254	Halliburton Energy Services	6	LBS	A99X	A99X	YES	011028		
140	43042963	6/1/2015	Magazine 4	HAL1254	Halliburton Energy Services	6	LBS	A99X	A99X	YES	011028		
140	43042964	6/1/2015	Magazine 4	HAL1254	Halliburton Energy Services	6	LBS	A99X	A99X	YES	011028		
140	43042965	6/1/2015	Magazine 4	HAL1254	Halliburton Energy Services	6	LBS	A99X	A99X	YES	011028		
140	43042966	6/1/2015	Magazine 4	HAL1254	Halliburton Energy Services	2	LBS	A99X	A99X	YES	CH934107		
140	43042967	6/1/2015	Magazine 4	HAL1254	Halliburton Energy Services	2	LBS	A99X	A99X	YES	CH934107		
140	43042968	6/1/2015	Magazine 4	HAL1254	Halliburton Energy Services	2	LBS	A99X	A99X	YES	CH934107		
140	43043003	6/1/2015	Magazine 3	HAL1254	Halliburton Energy Services	1	LBS	A99X	A99X	YES	409026		
140	43043004	6/1/2015	Magazine 3	HAL1254	Halliburton Energy Services	1	LBS	A99X	A99X	YES	409026		
140	43043005	6/1/2015	Magazine 4	HAL1254	Halliburton Energy Services	15	LBS	A99X	A99X	YES	CH934620		
140	43043146	6/1/2015	Magazine 3	HAL1254	Halliburton Energy Services	1	LBS	A99X	A99X	YES	011031		
140	43043147	6/1/2015	Magazine 3	HAL1254	Halliburton Energy Services	1	LBS	A99X	A99X	YES	011031		
140	43043148	6/1/2015	Magazine 3	HAL1254	Halliburton Energy Services	1	LBS	A99X	A99X	YES	011031		
140	43043153	6/1/2015	Magazine 3	HAL1254	Halliburton Energy Services	1	LBS	A99X	A99X	YES	011031		
140	43043318	6/1/2015	Magazine 3	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883048		
140	43043319	6/1/2015	Magazine 3	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH882967		
140	43043320	6/1/2015	Magazine 4	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883091		
140	43043321	6/1/2015	Magazine 4	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883143		
140	43043326	6/1/2015	Magazine 3	HA37249	Halliburton	2	LBS	A99X	A99X	YES	CH883195		
140	43043327	6/1/2015	Magazine 3	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883218		
140	43043524	6/1/2015	Magazine 4	HA37249	Halliburton	2	LBS	A99X	A99X	YES	CH882999		
140	43043525	6/1/2015	Magazine 4	HA37249	Halliburton	2	LBS	A99X	A99X	YES	CH882999		
140	43043526	6/1/2015	Magazine 4	HA37249	Halliburton	2	LBS	A99X	A99X	YES	CH882999		
140	43043527	6/1/2015	Magazine 4	HA37249	Halliburton	2	LBS	A99X	A99X	YES	CH882999		
140	43043528	6/1/2015	Magazine 4	HA37249	Halliburton	2	LBS	A99X	A99X	YES	CH882999		
140	43043529	6/1/2015	Magazine 4	HA37249	Halliburton	2	LBS	A99X	A99X	YES	CH882999		
140	43043530	6/1/2015	Magazine 4	HA37249	Halliburton	2	LBS	A99X	A99X	YES	CH882999		
140	43043531	6/1/2015	Magazine 4	HA37249	Halliburton	2	LBS	A99X	A99X	YES	CH882999		



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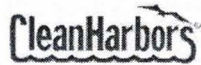
Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
140	43043532	6/1/2015	Magazine 4	HA37249	Halliburton	2	LBS	A99X	A99X	YES	CH882999		
140	43043783	6/1/2015	Magazine 4	LO0415	Lockheed Martin Aeronautics Co	6	LBS	A99X	A99X	YES	CH577100		
140	43043949	6/1/2015	Magazine 3	LO0415	Lockheed Martin Aeronautics Co	1	LBS	A99X	A99X	YES	CH579015		
140	43043950	6/1/2015	Magazine 3	LO0415	Lockheed Martin Aeronautics Co	1	LBS	A99X	A99X	YES	CH579015		
140	43046526	6/1/2015	Magazine 4	CF	Clean Harbors Colfax LLC	2	LBS	A99X	A99X	YES	InHouse		
140	43046527	6/1/2015	Magazine 4	CF	Clean Harbors Colfax LLC	2	LBS	A99X	A99X	YES	InHouse		
140	43046528	6/1/2015	Magazine 4	CF	Clean Harbors Colfax LLC	2	LBS	A99X	A99X	YES	InHouse		
140	43046529	6/1/2015	Magazine 4	CF	Clean Harbors Colfax LLC	2	LBS	A99X	A99X	YES	InHouse		
140	43046530	6/1/2015	Magazine 4	CF	Clean Harbors Colfax LLC	2	LBS	A99X	A99X	YES	InHouse		
135	43125583	6/1/2015	Magazine 10	ACT0546	Action Manufacturing Company	1	LBS	A99X	A99X	YES	110082		
135	43125584	6/1/2015	Magazine 10	ACT0546	Action Manufacturing Company	2	LBS	A99X	A99X	YES	110083		
135	43125585	6/1/2015	Magazine 10	ACT0546	Action Manufacturing Company	76	LBS	A99X	A99X	YES	110078		
135	43125586	6/1/2015	Magazine 10	ACT0546	Action Manufacturing Company	78	LBS	A99X	A99X	YES	110081		
135	43125587	6/1/2015	Magazine 10	ACT0546	Action Manufacturing Company	67	LBS	A99X	A99X	YES	110079		
135	43127509	6/1/2015	Magazine 8	AUT1564	Autoliv Asp Inc	70	LBS	A99X	A99X	YES	CH548782		
129	43263641	6/1/2015	Magazine 10	HI0787	Chemring Energetic Devices Inc	1	LBS	A99X	A99X	YES	his 030		
127	43321576	6/1/2015	Magazine 3	TR33692	Tripoint LLC	1	LBS	A99X	A99X	YES	CH928819		
127	43321577	6/1/2015	Magazine 3	TR33692	Tripoint LLC	1	LBS	A99X	A99X	YES	CH928822		
127	43321578	6/1/2015	Magazine 3	TR33692	Tripoint LLC	1	LBS	A99X	A99X	YES	CH928822		
127	43321579	6/1/2015	Magazine 3	TR33692	Tripoint LLC	1	LBS	A99X	A99X	YES	CH928837		
127	43321580	6/1/2015	Magazine 3	TR33692	Tripoint LLC	1	LBS	A99X	A99X	YES	CH928839		
127	43321581	6/1/2015	Magazine 3	TR33692	Tripoint LLC	1	LBS	A99X	A99X	YES	CH928839		
127	43321582	6/1/2015	Magazine 3	TR33692	Tripoint LLC	1	LBS	A99X	A99X	YES	CH928847		
121	43412120	6/1/2015	Magazine 7	TE29625	Textron	38	LBS	A99X	A99X	YES	CH917893		
121	43412121	6/1/2015	Magazine 7	TE29625	Textron	2	LBS	A99X	A99X	YES	CH917891		
121	43412122	6/1/2015	Magazine 7	TE29625	Textron	1	LBS	A99X	A99X	YES	CH917895		
121	43412126	6/1/2015	Magazine 7	TE29625	Textron	1	LBS	A99X	A99X	YES	CH918964		
121	43412127	6/1/2015	Magazine 7	TE29625	Textron	1	LBS	A99X	A99X	YES	CH917892		
91 - 120													
120	43425725	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
120	43425726	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
120	43425727	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
120	43425728	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
120	43425729	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		



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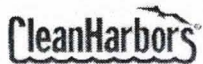
Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
120	43425730	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
120	43425731	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
120	43425732	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
120	43425733	6/1/2015	Magazine 3	DY000002	Dyno Nobel Inc	1	LBS	A99X	A99X	YES	DNI-0690		
115	43499368	6/1/2015	Magazine 7	BFG0546	Goodrich - UPCO	27	LBS	A99X	A99X	YES	104160		
115	43499369	6/1/2015	Magazine 7	BFG0546	Goodrich - UPCO	7	LBS	A99X	A99X	YES	104160		
115	43499370	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	10	LBS	A99X	A99X	YES	201050		
115	43499371	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	3	LBS	A99X	A99X	YES	201072		
115	43499372	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	7	LBS	A99X	A99X	YES	201087		
115	43499381	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	4	LBS	A99X	A99X	YES	201039p		
115	43499382	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	4	LBS	A99X	A99X	YES	201039p		
115	43499383	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	4	LBS	A99X	A99X	YES	201039p		
115	43499384	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	4	LBS	A99X	A99X	YES	201058p		
115	43499385	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	4	LBS	A99X	A99X	YES	201058p		
115	43499386	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	4	LBS	A99X	A99X	YES	201058p		
115	43499387	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	4	LBS	A99X	A99X	YES	201058p		
115	43499388	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	4	LBS	A99X	A99X	YES	201058p		
115	43499389	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	4	LBS	A99X	A99X	YES	201058p		
115	43499390	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	4	LBS	A99X	A99X	YES	201058p		
115	43499406	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	3	LBS	A99X	A99X	YES	201090P		
115	43499407	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	3	LBS	A99X	A99X	YES	201051		
115	43499408	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	2	LBS	A99X	A99X	YES	201053p		
115	43499409	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	2	LBS	A99X	A99X	YES	201054p		
115	43499410	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	13	LBS	A99X	A99X	YES	201052p		
115	43499411	6/1/2015	Magazine 3	BFG0546	Goodrich - UPCO	1	LBS	A99X	A99X	YES	201076p		
115	43499412	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	1	LBS	A99X	A99X	YES	201091p		
115	43510048	6/1/2015	Magazine 10	CH4056	Tech Ord	2	LBS	A99X	A99X	YES	CH523610		
115	43510049	6/1/2015	Magazine 10	CH4056	Tech Ord	2	LBS	A99X	A99X	YES	CH523610		
115	43510050	6/1/2015	Magazine 10	CH4056	Tech Ord	2	LBS	A99X	A99X	YES	CH523610		
115	43510051	6/1/2015	Magazine 10	CH4056	Tech Ord	2	LBS	A99X	A99X	YES	CH523610		
115	43510052	6/1/2015	Magazine 10	CH4056	Tech Ord	2	LBS	A99X	A99X	YES	CH523610		
115	43510053	6/1/2015	Magazine 10	CH4056	Tech Ord	2	LBS	A99X	A99X	YES	CH523610		
111	43655744	6/1/2015	Magazine 9	HI0787	Chemring Energetic Devices Inc	1	LBS	A99X	A99X	YES	his 031		
111	43655745	6/1/2015	Magazine 9	HI0787	Chemring Energetic Devices Inc	1	LBS	A99X	A99X	YES	his 031		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
111	43656743	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656754	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656842	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656856	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656857	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656858	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656859	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656860	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656861	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656862	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656863	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656864	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656865	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656866	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656867	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656868	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656869	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656870	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656871	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656872	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656873	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656874	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656875	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656876	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656877	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
111	43656878	6/1/2015	Magazine 8	WAL1438	Walt Disney World	25	LBS	A99X	A99X	YES	007006		
107	43713002	6/6/2015	Magazine 5	HAL1252	Halliburton Energy Service	1	LBS	A99X	A99X	YES	CH581960		
107	43716991	6/6/2015	Magazine 5	CF	Clean Harbors Colfax LLC	1	LBS	A99X	A99X	YES	InHouse		
106	43711919	6/1/2015	Magazine 3	HAL1252	Halliburton Energy Service	1	LBS	A99X	A99X	YES	206046		
106	43711920	6/1/2015	Magazine 3	HAL1252	Halliburton Energy Service	1	LBS	A99X	A99X	YES	107035		
106	43711921	6/1/2015	Magazine 3	HAL1252	Halliburton Energy Service	1	LBS	A99X	A99X	YES	206041		
106	43711922	6/1/2015	Magazine 3	HAL1252	Halliburton Energy Service	1	LBS	A99X	A99X	YES	206047		
106	43711923	6/1/2015	Magazine 3	HAL1252	Halliburton Energy Service	1	LBS	A99X	A99X	YES	CH483242		
106	43711924	6/1/2015	Magazine 3	HAL1252	Halliburton Energy Service	1	LBS	A99X	A99X	YES	CH483244		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
106	43711925	6/1/2015	Magazine 3	HAL1252	Halliburton Energy Service	1	LBS	A99X	A99X	YES	CH483244		
106	43711926	6/1/2015	Magazine 3	HAL1252	Halliburton Energy Service	1	LBS	A99X	A99X	YES	505059		
105	43740754	6/1/2015	Magazine 3	HA1689	Halliburton Energy Services Inc	4	LBS	A99X	A99X	YES	CH207244		
105	43740755	6/1/2015	Magazine 3	HA1689	Halliburton Energy Services Inc	1	LBS	A99X	A99X	YES	CH207501		
105	43740756	6/1/2015	Magazine 3	HA1689	Halliburton Energy Services Inc	2	LBS	A99X	A99X	YES	CH207248		
105	43740757	6/1/2015	Magazine 3	HA1689	Halliburton Energy Services Inc	3	LBS	A99X	A99X	YES	CH207248		
105	43740837	6/6/2015	Magazine 5	FE11798	Fedex Express 118099	2	LBS	A99X	A99X	YES	683142		
105	43741578	6/1/2015	Magazine 3	HA3224	Halliburton	1	LBS	A99X	A99X	YES	CH463914		
105	43756271	6/6/2015	Magazine 5	SH3446	Shell Offshore Inc - CPORT 2 Fourchon	1	LBS	A99X	A99X	YES	CH941978		
105	43756272	6/6/2015	Magazine 5	SH3446	Shell Offshore Inc - CPORT 2 Fourchon	1	LBS	A99X	A99X	YES	CH822980		
93	38516160	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY10	LCY10	YES	INTER-LCY10		
93	38538259	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY10	LCY10	YES	INTER-LCY10		
93	41247721	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41247722	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41247723	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41247724	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41247725	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41247726	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41396524	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41396525	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41396526	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41396527	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41396528	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41396529	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41396530	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41396531	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41957783	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41957784	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41957785	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41957786	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41957787	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41957788	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41957789	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	41957790	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
93	42026242	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42026243	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42026244	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42026245	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42026246	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42026247	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42026248	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42026249	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42026250	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42487781	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42487782	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42487783	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42487784	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42487785	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42487786	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42487787	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42487788	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42526817	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42526818	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42526819	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42526820	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42526821	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42526822	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42607832	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42607833	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42607834	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42607835	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	42607836	6/1/2015	Preparation Area	DE	Clean Harbors Deer Park, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
93	43946631	6/1/2015	Magazine 4	HA38523	Halliburton	4	LBS	A99X	A99X	YES	CH699740		
93	43946632	6/1/2015	Magazine 4	HA38523	Halliburton	4	LBS	A99X	A99X	YES	CH699740		
93	43946633	6/1/2015	Magazine 4	HA38523	Halliburton	4	LBS	A99X	A99X	YES	CH699740		
93	43946634	6/1/2015	Magazine 4	HA38523	Halliburton	1	LBS	A99X	A99X	YES	CH699732		
93	43946635	6/1/2015	Magazine 4	HA38523	Halliburton	1	LBS	A99X	A99X	YES	CH699735		
93	43946639	6/1/2015	Magazine 4	HA38523	Halliburton	5	LBS	A99X	A99X	YES	CH938546		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
93	43946640	6/1/2015	Magazine 4	HA38523	Halliburton	5	LBS	A99X	A99X	YES	CH938546		
93	43946658	6/1/2015	Magazine 3	HA3539	Halliburton Energy Services	2	LBS	A99X	A99X	YES	CH935813		
93	43946661	6/1/2015	Magazine 4	HA3539	Halliburton Energy Services	1	LBS	A99X	A99X	YES	CH622858		
93	43946670	6/1/2015	Magazine 3	HA3539	Halliburton Energy Services	1	LBS	A99X	A99X	YES	CH846830		
93	43946675	6/1/2015	Magazine 4	HA3539	Halliburton Energy Services	1	LBS	A99X	A99X	YES	CH935821		
93	43946676	6/1/2015	Magazine 4	HA3539	Halliburton Energy Services	1	LBS	A99X	A99X	YES	CH935821		
93	43946685	6/1/2015	Magazine 4	HA3539	Halliburton Energy Services	2	LBS	A99X	A99X	YES	CH622863		
93	43946686	6/1/2015	Magazine 4	HA3539	Halliburton Energy Services	2	LBS	A99X	A99X	YES	CH622863		
93	43946687	6/1/2015	Magazine 4	HA3539	Halliburton Energy Services	2	LBS	A99X	A99X	YES	CH475297		
93	43946688	6/1/2015	Magazine 4	HA3539	Halliburton Energy Services	2	LBS	A99X	A99X	YES	CH475297		
93	43946689	6/1/2015	Magazine 4	HA3539	Halliburton Energy Services	2	LBS	A99X	A99X	YES	CH475297		
93	43946690	6/1/2015	Magazine 4	HA3539	Halliburton Energy Services	2	LBS	A99X	A99X	YES	CH475297		
93	43946693	6/1/2015	Magazine 4	HA3539	Halliburton Energy Services	2	LBS	A99X	A99X	YES	CH475297		
93	43946703	6/1/2015	Magazine 4	HA3539	Halliburton Energy Services	1	LBS	A99X	A99X	YES	CH475304		
93	43946704	6/1/2015	Magazine 4	HA3539	Halliburton Energy Services	1	LBS	A99X	A99X	YES	CH475304		
93	43946705	6/1/2015	Magazine 4	HA3539	Halliburton Energy Services	1	LBS	A99X	A99X	YES	CH475304		
93	43946709	6/1/2015	Magazine 4	HA3539	Halliburton Energy Services	10	LBS	A99X	A99X	YES	CH475293		
93	43946740	6/1/2015	Magazine 4	UN4367	University of Iowa	1	LBS	A99X	A99X	YES	CH938987		
93	43946779	6/1/2015	Magazine 3	HA3224	Halliburton	1	LBS	A99X	A99X	YES	CH463934		
93	43952415	6/1/2015	Magazine 4	UR1976	URS Corporation	6	LBS	A99X	A99X	YES	CH916185		
93	43957573	6/1/2015	Magazine 4	CF	Clean Harbors Colfax LLC	10	LBS	A99X	A99X	YES	InHouse		
93	43957574	6/1/2015	Magazine 4	CF	Clean Harbors Colfax LLC	10	LBS	A99X	A99X	YES	InHouse		
93	43957575	6/1/2015	Magazine 4	CF	Clean Harbors Colfax LLC	2	LBS	A99X	A99X	YES	InHouse		
93	43957578	6/1/2015	Magazine 4	CF	Clean Harbors Colfax LLC	2	LBS	A99X	A99X	YES	InHouse		
93	43957579	6/1/2015	Magazine 4	CF	Clean Harbors Colfax LLC	2	LBS	A99X	A99X	YES	InHouse		
93	43957580	6/1/2015	Magazine 4	CF	Clean Harbors Colfax LLC	2	LBS	A99X	A99X	YES	InHouse		
92	43969079	6/1/2015	Magazine 10	PY0013	Pyrotechnic Specialties	1	LBS	A99X	A99X	YES	CH538361		
92	43969081	6/1/2015	Magazine 10	PY0013	Pyrotechnic Specialties	1	LBS	A99X	A99X	YES	CH538361		
92	43969082	6/1/2015	Magazine 10	PY0013	Pyrotechnic Specialties	1	LBS	A99X	A99X	YES	CH538361		
92	43969083	6/1/2015	Magazine 10	PY0013	Pyrotechnic Specialties	1	LBS	A99X	A99X	YES	CH538361		
91	43988901	6/1/2015	Magazine 3	MI3324	Milan Army Ammunition Plant	5	LBS	A99X	A99X	YES	CH952619		
91	43988902	6/1/2015	Magazine 3	MI3324	Milan Army Ammunition Plant	10	LBS	A99X	A99X	YES	701009		
91	43988903	6/1/2015	Magazine 4	MI3324	Milan Army Ammunition Plant	10	LBS	A99X	A99X	YES	701005		
91	43988904	6/1/2015	Magazine 4	MI3324	Milan Army Ammunition Plant	10	LBS	A99X	A99X	YES	701005		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
61 - 90													
84	42772857	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	42772858	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	42772859	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	42772860	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	42772861	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	42772862	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	42896219	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	42896220	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	42896221	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	42896222	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	42896223	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	42896224	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	42896225	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	42896226	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	42896227	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	42896228	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43139437	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43139438	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43139439	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43139440	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43139441	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43139442	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43139443	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43425544	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43425545	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43425546	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43425547	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43425548	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43425549	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43425550	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43425551	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43425552	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43425553	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
84	43425554	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43425555	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43425556	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43425557	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43650836	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43650837	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43650838	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43650839	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43650840	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43650841	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43742181	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43742183	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43742184	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43742185	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43742186	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43742187	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43742188	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43742189	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43742190	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43742191	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43742192	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
84	43742193	6/1/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
79	44183702	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		
79	44183703	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		
79	44183704	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		
79	44183705	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		
79	44183706	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		
79	44183707	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		
79	44183708	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		
79	44183709	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		
79	44183710	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		
79	44183711	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		
79	44183712	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		
79	44183713	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
79	44183714	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		
79	44183715	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		
79	44183716	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		
79	44183717	6/1/2015	Magazine 1	KI18063	Kilgore Flares Company, LLC	7	LBS	A99X	A99X	YES	CH631645		
79	44185988	6/1/2015	Magazine 8	PY0013	Pyrotechnic Specialties	15	LBS	A99X	A99X	YES	CH538258		
79	44185990	6/1/2015	Magazine 8	PY0013	Pyrotechnic Specialties	15	LBS	A99X	A99X	YES	CH538258		
77	44230537	6/1/2015	Magazine 7	TAL0343	Nammo Talley Inc	3	LBS	A99X	A99X	YES	206086		
77	44230541	6/1/2015	Magazine 7	TAL0343	Nammo Talley Inc	4	LBS	A99X	A99X	YES	204018		
77	44230544	6/1/2015	Magazine 7	TAL0343	Nammo Talley Inc	4	LBS	A99X	A99X	YES	CH393262		
77	44230545	6/1/2015	Magazine 7	TAL0343	Nammo Talley Inc	2	LBS	A99X	A99X	YES	206090		
77	44230547	6/1/2015	Magazine 7	TAL0343	Nammo Talley Inc	12	LBS	A99X	A99X	YES	206102p		
77	44230600	6/1/2015	Magazine 7	TAL0343	Nammo Talley Inc	1	LBS	A99X	A99X	YES	206080		
77	44230626	6/1/2015	Magazine 7	TAL0343	Nammo Talley Inc	1	LBS	A99X	A99X	YES	206147		
77	44230630	6/1/2015	Magazine 3	TAL0343	Nammo Talley Inc	1	LBS	A99X	A99X	YES	167-9643 UN0456		
76	44252246	6/1/2015	Magazine 8	CI2355	CCSF - Police - Hunter's Point	1	LBS	A99X	A99X	YES	CH956443		
76	44252247	6/1/2015	Magazine 8	CI2355	CCSF - Police - Hunter's Point	2	LBS	A99X	A99X	YES	CH956444		
76	44253939	6/1/2015	Magazine 8	SAN4613	Recology San Francisco	37	LBS	A99X	A99X	YES	CH353957		
76	44253941	6/1/2015	Magazine 8	SAN4613	Recology San Francisco	5	LBS	A99X	A99X	YES	CH952055		
72	44241531	6/1/2015	Magazine 5	KD1010	L-3 Fuzing & Ordnance Systems	1	LBS	A99X	A99X	YES	CH292743		
72	44241533	6/1/2015	Magazine 5	KD1010	L-3 Fuzing & Ordnance Systems	1	LBS	A99X	A99X	YES	CH292744		
72	44241534	6/1/2015	Magazine 3	KD1010	L-3 Fuzing & Ordnance Systems	1	LBS	A99X	A99X	YES	CH192591		
72	44241538	6/1/2015	Magazine 5	KD1010	L-3 Fuzing & Ordnance Systems	3	LBS	A99X	A99X	YES	CH292746		
72	44241539	6/1/2015	Magazine 5	KD1010	L-3 Fuzing & Ordnance Systems	4	LBS	A99X	A99X	YES	CH292746		
72	44241540	6/1/2015	Magazine 5	KD1010	L-3 Fuzing & Ordnance Systems	3	LBS	A99X	A99X	YES	CH292746		
72	44241544	6/1/2015	Magazine 5	KD1010	L-3 Fuzing & Ordnance Systems	1	LBS	A99X	A99X	YES	CH292754		
72	44241545	6/1/2015	Magazine 5	KD1010	L-3 Fuzing & Ordnance Systems	1	LBS	A99X	A99X	YES	CH720569		
72	44241546	6/1/2015	Magazine 8	KD1010	L-3 Fuzing & Ordnance Systems	1	LBS	A99X	A99X	YES	CH655034		
72	44241547	6/1/2015	Magazine 5	KD1010	L-3 Fuzing & Ordnance Systems	1	LBS	A99X	A99X	YES	CH622015		
72	44246688	6/1/2015	Magazine 3	KD1010	L-3 Fuzing & Ordnance Systems	1	LBS	A99X	A99X	YES	CH292742		
72	44246689	6/1/2015	Magazine 3	KD1010	L-3 Fuzing & Ordnance Systems	1	LBS	A99X	A99X	YES	CH605232		
72	44246690	6/1/2015	Magazine 3	KD1010	L-3 Fuzing & Ordnance Systems	1	LBS	A99X	A99X	YES	CH605232		
72	44246691	6/1/2015	Magazine 3	KD1010	L-3 Fuzing & Ordnance Systems	1	LBS	A99X	A99X	YES	CH292747		
72	44246692	6/1/2015	Magazine 3	KD1010	L-3 Fuzing & Ordnance Systems	2	LBS	A99X	A99X	YES	CH292747		
69	44369290	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	22	LBS	A99X	A99X	YES	CH519278		



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CF													
69	44369291	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	22	LBS	A99X	A99X	YES	CH519278		
69	44369292	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	22	LBS	A99X	A99X	YES	CH519278		
69	44369293	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	22	LBS	A99X	A99X	YES	CH519278		
69	44369294	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	22	LBS	A99X	A99X	YES	CH519278		
69	44369295	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	21	LBS	A99X	A99X	YES	CH519278		
69	44369296	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	21	LBS	A99X	A99X	YES	CH519278		
69	44369297	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	21	LBS	A99X	A99X	YES	CH519278		
69	44369298	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	21	LBS	A99X	A99X	YES	CH519278		
69	44369299	6/1/2015	Magazine 5	SP0540	Spectra Technologies LLC	21	LBS	A99X	A99X	YES	CH519278		
65	44421787	6/1/2015	Magazine 4	HA3224	Halliburton	2	LBS	A99X	A99X	YES	CH933071		
65	44421788	6/1/2015	Magazine 4	HA3224	Halliburton	1	LBS	A99X	A99X	YES	CH933071		
65	44421789	6/1/2015	Magazine 4	HA3224	Halliburton	2	LBS	A99X	A99X	YES	CH463920		
65	44421790	6/1/2015	Magazine 3	HA3224	Halliburton	4	LBS	A99X	A99X	YES	CH463914		
65	44421791	6/1/2015	Magazine 3	HA3224	Halliburton	1	LBS	A99X	A99X	YES	CH463914		
65	44421792	6/1/2015	Magazine 3	HA3224	Halliburton	1	LBS	A99X	A99X	YES	CH463914		
65	44422147	6/1/2015	Magazine 3	HA3224	Halliburton	2	LBS	A99X	A99X	YES	CH463934		
65	44422148	6/1/2015	Magazine 3	HA3224	Halliburton	1	LBS	A99X	A99X	YES	CH463934		
65	44422152	6/1/2015	Magazine 3	HA3224	Halliburton	1	LBS	A99X	A99X	YES	CH955269		
64	44445309	6/1/2015	Magazine 4	ATK0169	Orbital ATK Inc	1	LBS	A99X	A99X	YES	CH958516		
64	44445310	6/1/2015	Magazine 9	ATK0169	Orbital ATK Inc	12	LBS	A99X	A99X	YES	CH936520		
64	44445311	6/1/2015	Magazine 9	ATK0169	Orbital ATK Inc	12	LBS	A99X	A99X	YES	CH936520		
64	44445312	6/1/2015	Magazine 9	ATK0169	Orbital ATK Inc	12	LBS	A99X	A99X	YES	CH936520		
64	44445313	6/1/2015	Magazine 9	ATK0169	Orbital ATK Inc	12	LBS	A99X	A99X	YES	CH936520		
64	44445314	6/1/2015	Magazine 9	ATK0169	Orbital ATK Inc	12	LBS	A99X	A99X	YES	CH936520		
64	44445315	6/1/2015	Magazine 9	ATK0169	Orbital ATK Inc	11	LBS	A99X	A99X	YES	CH936520		
64	44445316	6/1/2015	Magazine 9	ATK0169	Orbital ATK Inc	11	LBS	A99X	A99X	YES	CH936520		
64	44445432	6/1/2015	Magazine 9	ATK0169	Orbital ATK Inc	18	LBS	A99X	A99X	YES	CH936526		
64	44445433	6/1/2015	Magazine 9	ATK0169	Orbital ATK Inc	18	LBS	A99X	A99X	YES	CH936526		
64	44445513	6/1/2015	Magazine 3	ATK0169	Orbital ATK Inc	1	LBS	A99X	A99X	YES	CH958546		
64	44445518	6/1/2015	Magazine 3	ATK0169	Orbital ATK Inc	2	LBS	A99X	A99X	YES	CH365795		
63	44464853	6/1/2015	Magazine 9	ALL1141	Kilgore Flares Company LLC	83	LBS	A99X	A99X	YES	CH898095		
63	44464854	6/1/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	81	LBS	A99X	A99X	YES	CH898095		
63	44464855	6/1/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	81	LBS	A99X	A99X	YES	CH898095		
63	44464856	6/1/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	81	LBS	A99X	A99X	YES	CH898095		



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CF													
63	44464857	6/1/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	81	LBS	A99X	A99X	YES	CH898095		
63	44464859	6/1/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	81	LBS	A99X	A99X	YES	CH898095		
63	44464862	6/1/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	81	LBS	A99X	A99X	YES	CH898095		
63	44464863	6/1/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	81	LBS	A99X	A99X	YES	CH898095		
63	44464864	6/1/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	81	LBS	A99X	A99X	YES	CH898095		
63	44464867	6/1/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	81	LBS	A99X	A99X	YES	CH898095		
62	44519762	6/1/2015	Magazine 8	DIS0739	Disneyland	10	LBS	A99X	A99X	YES	204112		
31 - 60													
48	44745111	6/1/2015	Magazine 10	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH523610		
48	44745112	6/1/2015	Magazine 10	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH523610		
48	44745113	6/1/2015	Magazine 10	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH523610		
48	44745114	6/1/2015	Magazine 10	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH523610		
48	44745115	6/1/2015	Magazine 10	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH523610		
48	44745116	6/1/2015	Magazine 10	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH523610		
48	44745117	6/1/2015	Magazine 10	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH523610		
48	44745118	6/1/2015	Magazine 10	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH523610		
45	44770115	6/1/2015	Magazine 4	SO28206	Southland Energy Services	15	LBS	A99X	A99X	YES	CH9704402		
45	44770116	6/1/2015	Magazine 4	SO28206	Southland Energy Services	4	LBS	A99X	A99X	YES	CH9704432		
45	44770117	6/1/2015	Magazine 4	SO28206	Southland Energy Services	4	LBS	A99X	A99X	YES	CH9704432		
45	44770118	6/1/2015	Magazine 4	SO28206	Southland Energy Services	4	LBS	A99X	A99X	YES	CH9704432		
45	44770119	6/1/2015	Magazine 4	SO28206	Southland Energy Services	12	LBS	A99X	A99X	YES	CH9704452		
45	44770120	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704452		
45	44770121	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704452		
45	44770122	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704452		
45	44770123	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704452		
45	44770124	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770125	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770126	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770127	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770128	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770129	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770130	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770131	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770132	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		



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CF													
45	44770133	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770134	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770135	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770136	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770137	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770138	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770139	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770140	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770141	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770142	6/1/2015	Magazine 4	SO28206	Southland Energy Services	11	LBS	A99X	A99X	YES	CH9704492		
45	44770297	6/1/2015	Magazine 4	SO28206	Southland Energy Services	1	LBS	A99X	A99X	YES	CH9704552		
45	44770298	6/1/2015	Magazine 4	SO28206	Southland Energy Services	15	LBS	A99X	A99X	YES	CH984153		
45	44770299	6/1/2015	Magazine 4	SO28206	Southland Energy Services	13	LBS	A99X	A99X	YES	CH9704492		
45	44770300	6/1/2015	Magazine 4	SO28206	Southland Energy Services	12	LBS	A99X	A99X	YES	CH9704492		
41	44865288	6/1/2015	Magazine 10	PY0013	Pyrotechnic Specialties	2	LBS	A99X	A99X	YES	CH538361		
41	44865289	6/1/2015	Magazine 10	PY0013	Pyrotechnic Specialties	2	LBS	A99X	A99X	YES	CH538361		
41	44865290	6/1/2015	Magazine 10	PY0013	Pyrotechnic Specialties	2	LBS	A99X	A99X	YES	CH538361		
41	44865291	6/1/2015	Magazine 10	PY0013	Pyrotechnic Specialties	2	LBS	A99X	A99X	YES	CH538361		
41	44865292	6/1/2015	Magazine 10	PY0013	Pyrotechnic Specialties	2	LBS	A99X	A99X	YES	CH538361		
41	44865293	6/1/2015	Magazine 10	PY0013	Pyrotechnic Specialties	2	LBS	A99X	A99X	YES	CH538361		
41	44865294	6/1/2015	Magazine 10	PY0013	Pyrotechnic Specialties	2	LBS	A99X	A99X	YES	CH538361		
41	44865347	6/1/2015	Magazine 5	PY0013	Pyrotechnic Specialties	25	LBS	A99X	A99X	YES	CH633309		
41	44865360	6/1/2015	Magazine 10	PY0013	Pyrotechnic Specialties	2	LBS	A99X	A99X	YES	CH538361		
35	44968319	6/1/2015	Magazine 7	AE0526	Aerojet Rocketdyne Inc	1	LBS	A99X	A99X	YES	CH929743		
35	44968322	6/1/2015	Magazine 9	AE0526	Aerojet Rocketdyne Inc	151	LBS	A99X	A99X	YES	CH196234		
35	44968323	6/1/2015	Magazine 7	AE0526	Aerojet Rocketdyne Inc	1	LBS	A99X	A99X	YES	CH613901		
35	44968324	6/1/2015	Magazine 7	AE0526	Aerojet Rocketdyne Inc	1	LBS	A99X	A99X	YES	CH613901		
35	44968325	6/1/2015	Magazine 7	AE0526	Aerojet Rocketdyne Inc	1	LBS	A99X	A99X	YES	CH613901		
35	44968326	6/1/2015	Magazine 7	AE0526	Aerojet Rocketdyne Inc	1	LBS	A99X	A99X	YES	CH613901		
35	44968327	6/1/2015	Magazine 7	AE0526	Aerojet Rocketdyne Inc	1	LBS	A99X	A99X	YES	CH613901		
35	44968328	6/1/2015	Magazine 7	AE0526	Aerojet Rocketdyne Inc	1	LBS	A99X	A99X	YES	CH613901		
35	44968330	6/1/2015	Magazine 7	AE0526	Aerojet Rocketdyne Inc	1	LBS	A99X	A99X	YES	CH980581		
34	44991703	6/1/2015	Magazine 7	PY0010	Pyrotechnique by Grucci	23	LBS	A99X	A99X	YES	CH568825		
34	44991704	6/1/2015	Magazine 7	PY0010	Pyrotechnique by Grucci	21	LBS	A99X	A99X	YES	CH568825		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
34	44991705	6/1/2015	Magazine 7	PY0010	Pyrotechnique by Grucci	21	LBS	A99X	A99X	YES	CH568825		
34	44991706	6/1/2015	Magazine 7	PY0010	Pyrotechnique by Grucci	21	LBS	A99X	A99X	YES	CH568825		
34	44991707	6/1/2015	Magazine 7	PY0010	Pyrotechnique by Grucci	21	LBS	A99X	A99X	YES	CH568825		
34	44991778	6/1/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	1	LBS	A99X	A99X	YES	975672		
34	44991779	6/1/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	1	LBS	A99X	A99X	YES	976471		
34	44991782	6/1/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991783	6/9/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991784	6/9/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991786	6/9/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991788	6/9/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991791	6/9/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991792	6/9/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991793	6/1/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991797	6/1/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991800	6/1/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991805	6/9/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991806	6/9/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991809	6/1/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991810	6/1/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991811	6/1/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991812	6/1/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	44991813	6/1/2015	Magazine 7	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	976471		
34	45005347	6/1/2015	Magazine 7	CA56880	Cased Hole Well Services LLC	1	LBS	A99X	A99X	YES	CH973283		
34	45005348	6/1/2015	Magazine 7	CA56880	Cased Hole Well Services LLC	1	LBS	A99X	A99X	YES	CH973278		
34	45005349	6/9/2015	Magazine 7	CA56880	Cased Hole Well Services LLC	1	LBS	A99X	A99X	YES	CH958304		
34	45005350	6/9/2015	Magazine 7	CA56880	Cased Hole Well Services LLC	1	LBS	A99X	A99X	YES	CH958304		
34	45005368	6/1/2015	Magazine 7	CA56880	Cased Hole Well Services LLC	1	LBS	A99X	A99X	YES	CH958311		
34	45005369	6/1/2015	Magazine 7	CA56880	Cased Hole Well Services LLC	1	LBS	A99X	A99X	YES	CH973288		
31	45020442	6/1/2015	Magazine 10	ACT0546	Action Manufacturing Company	5	LBS	A99X	A99X	YES	110083		
31	45020443	6/1/2015	Magazine 10	ACT0546	Action Manufacturing Company	105	LBS	A99X	A99X	YES	CH606245		
31	45020933	6/1/2015	Magazine 9	LOC2362	Lockheed Martin Space Systems	51	LBS	A99X	A99X	YES	311060		
31	45020934	6/1/2015	Magazine 9	LOC2362	Lockheed Martin Space Systems	1	LBS	A99X	A99X	YES	ch205515		
31	45020935	6/1/2015	Magazine 9	LOC2362	Lockheed Martin Space Systems	1	LBS	A99X	A99X	YES	311062		
31	45020937	6/1/2015	Magazine 9	LOC2362	Lockheed Martin Space Systems	1	LBS	A99X	A99X	YES	412210		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
31	45020938	6/1/2015	Magazine 9	LOC2362	Lockheed Martin Space Systems	1	LBS	A99X	A99X	YES	311061		
0 - 30													
30	45039124	6/1/2015	Magazine 7	SP22167	Space Exploration Technologies Corp	11	LBS	A99X	A99X	YES	CH994509		
30	45039125	6/1/2015	Magazine 7	SP22167	Space Exploration Technologies Corp	11	LBS	A99X	A99X	YES	CH994508		
30	45040875	6/1/2015	Magazine 7	BFG0546	Goodrich - UPCO	34	LBS	A99X	A99X	YES	104160		
30	45040876	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	3	LBS	A99X	A99X	YES	201083p		
30	45040877	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	2	LBS	A99X	A99X	YES	201072		
30	45040878	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	2	LBS	A99X	A99X	YES	201072		
30	45040879	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	2	LBS	A99X	A99X	YES	201072		
30	45040895	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	2	LBS	A99X	A99X	YES	201058p		
30	45040896	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	2	LBS	A99X	A99X	YES	201058p		
30	45040898	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	2	LBS	A99X	A99X	YES	201058p		
30	45040911	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	3	LBS	A99X	A99X	YES	201051		
30	45040912	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	3	LBS	A99X	A99X	YES	201051		
30	45040916	6/1/2015	Magazine 3	BFG0546	Goodrich - UPCO	1	LBS	A99X	A99X	YES	201076p		
30	45040917	6/1/2015	Magazine 3	BFG0546	Goodrich - UPCO	1	LBS	A99X	A99X	YES	201076p		
30	45040920	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	1	LBS	A99X	A99X	YES	201039p		
30	45040921	6/1/2015	Magazine 4	BFG0546	Goodrich - UPCO	3	LBS	A99X	A99X	YES	201054p		
30	45044460	6/1/2015	Magazine 4	ACT0546	Action Manufacturing Company	1	LBS	A99X	A99X	YES	CH722030		
30	45044461	6/1/2015	Magazine 4	ACT0546	Action Manufacturing Company	1	LBS	A99X	A99X	YES	CH590447		
30	45044462	6/1/2015	Magazine 4	ACT0546	Action Manufacturing Company	1	LBS	A99X	A99X	YES	CH590447		
30	45044463	6/1/2015	Magazine 4	ACT0546	Action Manufacturing Company	1	LBS	A99X	A99X	YES	CH590447		
30	45044464	6/1/2015	Magazine 4	ACT0546	Action Manufacturing Company	1	LBS	A99X	A99X	YES	CH590447		
30	45044465	6/1/2015	Magazine 4	ACT0546	Action Manufacturing Company	1	LBS	A99X	A99X	YES	CH590447		
30	45044466	6/1/2015	Magazine 4	ACT0546	Action Manufacturing Company	1	LBS	A99X	A99X	YES	CH590447		
30	45044467	6/1/2015	Magazine 4	ACT0546	Action Manufacturing Company	1	LBS	A99X	A99X	YES	CH590447		
30	45044927	6/1/2015	Magazine 3	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH587581		
30	45044928	6/1/2015	Magazine 3	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH587581		
30	45044929	6/1/2015	Magazine 3	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH587581		
30	45044930	6/1/2015	Magazine 3	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH587581		
30	45044931	6/1/2015	Magazine 3	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH587581		
30	45044932	6/1/2015	Magazine 3	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH587581		
30	45044933	6/1/2015	Magazine 3	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH587581		
30	45044934	6/1/2015	Magazine 3	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH587581		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
30	45044935	6/1/2015	Magazine 3	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH587581		
30	45044936	6/1/2015	Magazine 3	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH587581		
30	45044937	6/1/2015	Magazine 3	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH587581		
30	45044938	6/1/2015	Magazine 3	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH587581		
30	45044939	6/1/2015	Magazine 3	CH4056	Tech Ord	1	LBS	A99X	A99X	YES	CH587581		
30	45045248	6/1/2015	Magazine 8	PY0013	Pyrotechnic Specialties	3	LBS	A99X	A99X	YES	CH538258		
30	45045249	6/1/2015	Magazine 8	PY0013	Pyrotechnic Specialties	3	LBS	A99X	A99X	YES	CH538258		
30	45045250	6/1/2015	Magazine 8	PY0013	Pyrotechnic Specialties	3	LBS	A99X	A99X	YES	CH538258		
30	45045251	6/1/2015	Magazine 8	PY0013	Pyrotechnic Specialties	3	LBS	A99X	A99X	YES	CH538258		
30	45045252	6/1/2015	Magazine 8	PY0013	Pyrotechnic Specialties	3	LBS	A99X	A99X	YES	CH538258		
30	45045253	6/1/2015	Magazine 8	PY0013	Pyrotechnic Specialties	3	LBS	A99X	A99X	YES	CH538258		
30	45045254	6/1/2015	Magazine 8	PY0013	Pyrotechnic Specialties	3	LBS	A99X	A99X	YES	CH538258		
30	45045255	6/1/2015	Magazine 8	PY0013	Pyrotechnic Specialties	3	LBS	A99X	A99X	YES	CH538258		
30	45045531	6/1/2015	Magazine 3	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	CH976483		
30	45045532	6/1/2015	Magazine 3	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	CH976483		
30	45045533	6/1/2015	Magazine 3	GE23787	Ge Oil & Gas Logging Services	2	LBS	A99X	A99X	YES	CH976483		
30	45045535	6/1/2015	Magazine 4	GE23787	Ge Oil & Gas Logging Services	3	LBS	A99X	A99X	YES	975677		
30	45045537	6/1/2015	Magazine 4	GE23787	Ge Oil & Gas Logging Services	3	LBS	A99X	A99X	YES	975677		
30	45045538	6/1/2015	Magazine 3	GE23787	Ge Oil & Gas Logging Services	1	LBS	A99X	A99X	YES	CH976489		
30	45071082	6/1/2015	Magazine 10	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH916497		
30	45071083	6/1/2015	Magazine 10	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH916497		
30	45071084	6/1/2015	Magazine 10	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH916497		
30	45071085	6/1/2015	Magazine 10	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH916497		
30	45071086	6/1/2015	Magazine 10	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH916497		
30	45071087	6/1/2015	Magazine 10	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH514640		
30	45071088	6/1/2015	Magazine 10	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH526221		
30	45071089	6/1/2015	Magazine 10	SAN3651A	Sandia National Laboratories	1	LBS	A99X	A99X	YES	CH526221		
29	45068968	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068969	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068970	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068971	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068972	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068973	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068974	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
29	45068975	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068976	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068977	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068978	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068979	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068980	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068981	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068982	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068983	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068984	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068985	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068986	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068987	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	5	LBS	A99X	A99X	YES	CH568809		
29	45068988	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45068989	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45068990	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45068991	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45068992	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45068993	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45068994	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45068995	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45068996	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45068997	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45068998	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45068999	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069000	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069001	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069002	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069003	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069004	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069005	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069006	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069007	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069008	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
29	45069009	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069010	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069011	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069012	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069013	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069014	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069015	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069016	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069017	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069018	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069019	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069020	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069021	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069022	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069023	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069024	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069025	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069026	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069027	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069028	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069029	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069030	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069031	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069032	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069033	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069034	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069035	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069036	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069037	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069038	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069039	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	6	LBS	A99X	A99X	YES	CH568809		
29	45069040	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	3	LBS	A99X	A99X	YES	CH569751		
29	45069041	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	3	LBS	A99X	A99X	YES	CH569751		
29	45069042	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	3	LBS	A99X	A99X	YES	CH569751		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
29	45069043	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	3	LBS	A99X	A99X	YES	CH569751		
29	45069044	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	3	LBS	A99X	A99X	YES	CH569751		
29	45069045	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	3	LBS	A99X	A99X	YES	CH569751		
29	45069046	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	3	LBS	A99X	A99X	YES	CH569751		
29	45069047	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	3	LBS	A99X	A99X	YES	CH569751		
29	45069048	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	3	LBS	A99X	A99X	YES	CH569751		
29	45069049	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	3	LBS	A99X	A99X	YES	CH569751		
29	45069050	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	3	LBS	A99X	A99X	YES	CH569751		
29	45069051	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	3	LBS	A99X	A99X	YES	CH569751		
29	45069052	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	3	LBS	A99X	A99X	YES	CH569751		
29	45069053	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	3	LBS	A99X	A99X	YES	CH569751		
29	45069054	6/1/2015	Magazine 8	PY0010	Pyrotechnique by Grucci	3	LBS	A99X	A99X	YES	CH569751		
29	45069132	6/1/2015	Magazine 8	AL000003	PSC - Allworth Incorporated	1	LBS	A99X	A99X	YES	CH993068		
17	45276705	6/1/2015	Magazine 8	WAL1438	Walt Disney World	12	LBS	A99X	A99X	YES	007006		
17	45276706	6/1/2015	Magazine 8	WAL1438	Walt Disney World	12	LBS	A99X	A99X	YES	007006		
17	45276707	6/1/2015	Magazine 8	WAL1438	Walt Disney World	12	LBS	A99X	A99X	YES	007006		
17	45276708	6/1/2015	Magazine 8	WAL1438	Walt Disney World	12	LBS	A99X	A99X	YES	007006		
17	45276709	6/1/2015	Magazine 8	WAL1438	Walt Disney World	12	LBS	A99X	A99X	YES	007006		
17	45276710	6/1/2015	Magazine 8	WAL1438	Walt Disney World	12	LBS	A99X	A99X	YES	007006		
17	45276711	6/1/2015	Magazine 8	WAL1438	Walt Disney World	12	LBS	A99X	A99X	YES	007006		
17	45276712	6/1/2015	Magazine 8	WAL1438	Walt Disney World	12	LBS	A99X	A99X	YES	007006		
17	45276733	6/6/2015	Magazine 8	WAL1438	Walt Disney World	12	LBS	A99X	A99X	YES	007006		
17	45276737	6/6/2015	Magazine 8	WAL1438	Walt Disney World	12	LBS	A99X	A99X	YES	007006		
17	45276738	6/6/2015	Magazine 8	WAL1438	Walt Disney World	12	LBS	A99X	A99X	YES	007006		
17	45276739	6/6/2015	Magazine 8	WAL1438	Walt Disney World	12	LBS	A99X	A99X	YES	007006		
17	45276740	6/6/2015	Magazine 8	WAL1438	Walt Disney World	12	LBS	A99X	A99X	YES	007006		
14	45344669	6/4/2015	Magazine 8	BR2627	British Petroleum	5	LBS	A99X	A99X	YES	CH607232		
14	45344670	6/4/2015	Magazine 8	BR2627	British Petroleum	1	LBS	A99X	A99X	YES	606100		
14	45344671	6/4/2015	Magazine 8	BR2627	British Petroleum	6	LBS	A99X	A99X	YES	CH607229		
14	45344672	6/4/2015	Magazine 8	BR2627	British Petroleum	1	LBS	A99X	A99X	YES	CH607230		
14	45345223	6/4/2015	Preparation Area	CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
14	45345224	6/4/2015	Preparation Area	CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
14	45345225	6/4/2015	Preparation Area	CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
14	45345226	6/4/2015	Preparation Area	CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
14	45345227	6/4/2015	Preparation Area	CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
9	45426541			BA28268	Baker Atlas	1	LBS	A99X	A99X	YES	CH834119		
9	45426545	6/9/2015	Magazine 7	BA28268	Baker Atlas	1	LBS	A99X	A99X	YES	CH834690		
9	45426558	6/9/2015	Magazine 7	BA28268	Baker Atlas	1	LBS	A99X	A99X	YES	CH834690		
9	45426559	6/9/2015	Magazine 7	BA28268	Baker Atlas	1	LBS	A99X	A99X	YES	CH834690		
9	45426564	6/9/2015	Magazine 7	BA28268	Baker Atlas	1	LBS	A99X	A99X	YES	CH834122		
9	45426565	6/9/2015	Magazine 7	BA28268	Baker Atlas	1	LBS	A99X	A99X	YES	CH834125		
9	45426566	6/9/2015	Magazine 7	BA28268	Baker Atlas	1	LBS	A99X	A99X	YES	CH834125		
9	45426619	6/9/2015	Magazine 7	BA28268	Baker Atlas	1	LBS	A99X	A99X	YES	CH937117		
9	45426620	6/9/2015	Preparation Area	BA28268	Baker Atlas	3	LBS	A99X	A99X	YES	CH834905		
9	45426621	6/9/2015	Preparation Area	BA28268	Baker Atlas	3	LBS	A99X	A99X	YES	CH834905		
9	45426622	6/9/2015	Preparation Area	BA28268	Baker Atlas	3	LBS	A99X	A99X	YES	CH834905		
9	45426623	6/9/2015	Preparation Area	BA28268	Baker Atlas	3	LBS	A99X	A99X	YES	CH834905		
9	45426624	6/9/2015	Preparation Area	BA28268	Baker Atlas	3	LBS	A99X	A99X	YES	CH834905		
9	45427115	6/9/2015	Magazine 8	BP0493	BP Exploration & Production	5	LBS	A99X	A99X	YES	CH515436		
9	45427444	6/9/2015	Magazine 3	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883048		
9	45427445	6/9/2015	Magazine 3	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883048		
9	45427446	6/9/2015	Magazine 3	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883048		
9	45427447	6/9/2015	Magazine 3	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883048		
9	45427448	6/9/2015	Magazine 7	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883091		
9	45427449	6/9/2015	Magazine 7	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883091		
9	45427450	6/9/2015	Magazine 7	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883091		
9	45427451	6/9/2015	Magazine 3	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883195		
9	45427452	6/9/2015	Magazine 3	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883195		
9	45427453	6/9/2015	Magazine 3	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883189		
9	45427454	6/9/2015	Magazine 3	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883189		
9	45428013	6/9/2015	Magazine 7	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH882999		
9	45428014	6/9/2015	Magazine 7	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH882999		
9	45428015	6/9/2015	Magazine 7	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH882999		
9	45428016	6/9/2015	Magazine 7	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH882999		
9	45428017	6/9/2015	Magazine 7	HA37249	Halliburton	6	LBS	A99X	A99X	YES	CH883058		
9	45428018	6/9/2015	Magazine 7	HA37249	Halliburton	1	LBS	A99X	A99X	YES	CH883078		
9	45428019	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428020	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
9	45428021	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428022	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428023	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428024	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428025	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428026	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428027	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428028	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428029	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428030	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428031	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428032	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428033	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428034	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428035	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428036	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
9	45428037	6/9/2015	Magazine 7	HA37249	Halliburton	8	LBS	A99X	A99X	YES	CH883159		
7	45462454	6/11/2015	Magazine 8	SH3446	Shell Offshore Inc - CPORT 2 Fourchon	4	LBS	A99X	A99X	YES	CH812292		
7	45462538	6/11/2015	Magazine 8	SH3446	Shell Offshore Inc - CPORT 2 Fourchon	4	LBS	A99X	A99X	YES	CH941978		
6	45492666	6/12/2015	Magazine 3	BAE0161	Armtec Countermeasures Company	30	LBS	A99X	A99X	YES	512028		
6	45492667	6/12/2015	Magazine 3	BAE0161	Armtec Countermeasures Company	30	LBS	A99X	A99X	YES	512028		
6	45492668	6/12/2015	Magazine 3	BAE0161	Armtec Countermeasures Company	30	LBS	A99X	A99X	YES	512028		
6	45492669	6/12/2015	Magazine 3	BAE0161	Armtec Countermeasures Company	30	LBS	A99X	A99X	YES	512028		
6	45492670	6/12/2015	Magazine 3	BAE0161	Armtec Countermeasures Company	30	LBS	A99X	A99X	YES	512028		
6	45492684	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492685	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492686	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492687	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492688	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492689	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492690	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492691	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492692	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492693	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
6	45492694	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492695	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492696	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492697	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492698	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492699	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492700	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492701	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492702	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492703	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492704	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492705	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492706	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492707	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492708	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492709	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492710	6/12/2015	Magazine 6	BAE0161	Armtec Countermeasures Company	41	LBS	A99X	A99X	YES	610066		
6	45492808	6/12/2015	Magazine 3	GEN7203	General Dynamics	5	LBS	A99X	A99X	YES	CH599516		
6	45492809	6/12/2015	Magazine 3	GEN7203	General Dynamics	5	LBS	A99X	A99X	YES	CH599516		
6	45492810	6/12/2015	Magazine 3	GEN7203	General Dynamics	5	LBS	A99X	A99X	YES	CH599516		
6	45492811	6/12/2015	Magazine 3	GEN7203	General Dynamics	5	LBS	A99X	A99X	YES	CH599516		
6	45492812	6/12/2015	Magazine 3	GEN7203	General Dynamics	2	LBS	A99X	A99X	YES	711001		
6	45492818	6/12/2015	Magazine 8	GEN7203	General Dynamics	10	LBS	A99X	A99X	YES	711005		
6	45492819	6/12/2015	Magazine 8	GEN7203	General Dynamics	10	LBS	A99X	A99X	YES	711005		
6	45492826	6/12/2015	Magazine 8	GEN7203	General Dynamics	5	LBS	A99X	A99X	YES	CH565998		
6	45492829	6/12/2015	Magazine 8	GEN7203	General Dynamics	2	LBS	A99X	A99X	YES	711080		
6	45492982	6/12/2015	Preparation Area	GEN7203	General Dynamics	1	LBS	A99X	A99X	YES	CH963439		
6	45500283	6/12/2015	Magazine 9	GE0820	General Dynamics Armament Systems	17	LBS	A99X	A99X	YES	CH448750		
6	45500284	6/12/2015	Magazine 9	GE0820	General Dynamics Armament Systems	17	LBS	A99X	A99X	YES	CH448750		
6	45500285	6/12/2015	Magazine 9	GE0820	General Dynamics Armament Systems	17	LBS	A99X	A99X	YES	CH448750		
6	45500286	6/12/2015	Magazine 9	GE0820	General Dynamics Armament Systems	17	LBS	A99X	A99X	YES	CH448750		
6	45500287	6/12/2015	Magazine 9	GE0820	General Dynamics Armament Systems	17	LBS	A99X	A99X	YES	CH448750		
6	45500288	6/12/2015	Magazine 9	GE0820	General Dynamics Armament Systems	17	LBS	A99X	A99X	YES	CH448750		
3	45527357	6/15/2015	Magazine 10	ACT0546	Action Manufacturing Company	12	LBS	A99X	A99X	YES	110078		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
3	45527358	6/15/2015	Magazine 10	ACT0546	Action Manufacturing Company	15	LBS	A99X	A99X	YES	110079		
3	45527360	6/15/2015	Magazine 10	ACT0546	Action Manufacturing Company	8	LBS	A99X	A99X	YES	110081		
2	45542784	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542785	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542786	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542787	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542788	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542789	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542790	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542791	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542792	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542793	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542794	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542795	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542796	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542797	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542798	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542799	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542800	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542801	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542802	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542803	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542804	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542805	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542806	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542807	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542808	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542809	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542810	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542811	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542812	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542813	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542814	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542815	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
2	45542816	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542817	6/16/2015	Magazine 1	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542818	6/16/2015	Magazine 5	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542819	6/16/2015	Magazine 5	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542820	6/16/2015	Magazine 5	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542821	6/16/2015	Magazine 5	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542822	6/16/2015	Magazine 5	ALL1141	Kilgore Flares Company LLC	16	LBS	A99X	A99X	YES	CH898095		
2	45542823	6/16/2015	Magazine 5	ALL1141	Kilgore Flares Company LLC	15	LBS	A99X	A99X	YES	CH898095		
2	45542824	6/16/2015	Magazine 5	ALL1141	Kilgore Flares Company LLC	15	LBS	A99X	A99X	YES	CH898095		
1	43842820	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43842821	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43842822	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43842823	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43842824	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43842825	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43842826	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43929748	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43929749	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43929750	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43929751	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43929752	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43962186	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43962187	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43962188	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43962189	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43962190	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43962191	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43962192	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43962193	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43962194	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	43962195	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44082454	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44082455	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44082456	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		



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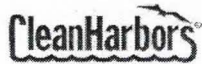
Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
1	44082457	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44082458	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136289	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136290	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136291	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136292	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136293	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136294	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136295	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136296	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136297	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136298	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136299	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136300	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136301	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136302	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136303	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136304	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136305	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136306	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136307	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136308	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44136309	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44331628	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44331629	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44331630	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44331631	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44331632	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44331633	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44331634	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44331635	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44331636	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44331637	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419901	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
1	44419902	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419903	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419904	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419905	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419906	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419907	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419908	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419909	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419910	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419911	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419912	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	6	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419913	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419914	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419915	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419916	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419917	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419918	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419919	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419920	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419921	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419922	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419923	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419924	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419925	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419926	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419927	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419928	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419929	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419930	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419931	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419932	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419933	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419934	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419935	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		



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Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
1	44419936	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419937	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419938	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419939	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419940	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419941	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419942	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419943	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419944	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419945	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44419946	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44439061	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44439062	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44439063	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44439064	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44439065	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44484046	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44484047	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44484048	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44484049	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44484050	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44484051	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44484052	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44484053	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44484054	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44484055	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44484056	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44484057	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44484058	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
1	44484059	6/17/2015	Preparation Area	LT	Clean Harbors LaPorte, LLC	1	LBS	LCY9	LCY9	YES	CF-LCY9-HAZ		
0	45586566			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586567			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586568			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586569			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		



Inventory Aging Detail Report

For CF As of 6/17/2015

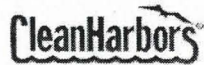
Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
0	45586570			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586571			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586572			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586573			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586574			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586575			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586576			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586577			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586578			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586579			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586580			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586581			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586582			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586583			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586584			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586585			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586586			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586587			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586588			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586589			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586590			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586591			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586592			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586593			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586594			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586595			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586596			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586597			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586598			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586599			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586600			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586601			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586602			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586603			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		



Inventory Aging Detail Report

For CF As of 6/17/2015

Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
0	45586604			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586605			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586606			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586607			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586608			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586609			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586610			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586611			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586612			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586613			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586614			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586615			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586616			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586617			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586618			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586619			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586620			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586621			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586622			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586623			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586624			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586625			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586626			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586627			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586628			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586629			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586630			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586631			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586632			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586633			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586634			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586635			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586636			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586637			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		



Inventory Aging Detail Report

For CF As of 6/17/2015

Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
0	45586638			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586639			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586640			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586641			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586642			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586643			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586644			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586645			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586646			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586647			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586648			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586649			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586650			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586651			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586652			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586653			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586654			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586655			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586656			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586657			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586658			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586659			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586660			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586661			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586662			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586663			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586664			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586665			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586666			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586667			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586668			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586669			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586670			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586671			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		



Inventory Aging Detail Report

For CF As of 6/17/2015

Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
0	45586672			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586673			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586674			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586675			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586676			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586677			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586678			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586679			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586680			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586681			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586682			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586683			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586684			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586685			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586686			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586687			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586688			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586689			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586690			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586691			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586692			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586693			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586694			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586695			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586696			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586697			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586698			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586699			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586700			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586701			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586702			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586703			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586704			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586705			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		



Inventory Aging Detail Report

For CF As of 6/17/2015

Days	Drum No.	Last Scan Dt	Area	Gen	Generator Name	Orig. Qty	UOM	Pre Cd	Proc Cd	Status	Profile	Load No.	Cons
CF													
0	45586706			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586707			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586708			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586709			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586710			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586711			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586712			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586713			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586714			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586715			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		
0	45586716			CA9177	Cal Fire	3	LBS	A99X	A99X	YES	CH431368		

Age Slot	Drum Count
211 - 240	7
181 - 210	39
151 - 180	24
121 - 150	90
91 - 120	175
61 - 90	142
31 - 60	95
0 - 30	587
Totals For CF	1159

EXHIBIT F

LDR FORM

Clean Harbors Colfax, LLC

LAD 0981055791, AI 32096



**NOTIFICATION & CERTIFICATION: RESTRICTED WASTE MEETING
TREATMENT STANDARDS**

Generator Name _____		Manifest No. _____			
Pursuant to 40 CFR §268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268 Land Disposal Restrictions (LDR).					
Basis for certification: Describe the knowledge upon which the certification is made and/or attach the most recent analytical data: <input type="checkbox"/> Analytical data attached					
A. GENERAL WASTE NOTIFICATION					
Form Line No.	Profile No.	EPA Waste Codes & LDR Subcategories (if any) <i>List codes or use Attachment 1</i>	NWW	WW	Waste Constituent Notification <i>Check the "None" box or List Legend Constituent # or use Attachment 2</i>
1		_____ <input type="checkbox"/> Check if Attachment 1 has been used	<input type="checkbox"/>	<input type="checkbox"/>	_____ <input type="checkbox"/> None <input type="checkbox"/> Check if Attachment 2 has been used
2		_____ <input type="checkbox"/> Check if Attachment 1 has been used	<input type="checkbox"/>	<input type="checkbox"/>	_____ <input type="checkbox"/> None <input type="checkbox"/> Check if Attachment 2 has been used
B. GENERATOR WASTE CERTIFICATION					
<input type="checkbox"/> This certification applies to the waste identified above on Form Line No. _____. "I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D. I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment". <input type="checkbox"/> Check if this waste partially meets treatment standards & list the constituent(s) which require further treatment in section A above.					
C. WASTE TREATMENT TECHNOLOGY & PROCESS CERTIFICATION					
<input type="checkbox"/> This certification applies to the waste identified above on Form Line No. _____. "I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR §268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment". <input type="checkbox"/> Check if this waste partially meets treatment standards & list the constituent(s) which require further treatment in section A above.					
D. CONTAMINATED SOIL TREATMENT TECHNOLOGY & PROCESS CERTIFICATION					
<input type="checkbox"/> This certification applies to the waste identified above on Form Line No. _____. "I certify under penalty of law that I have personally examined & am familiar with the treatment technology & operation of the treatment process used to support this certification & believe that it has been maintained & operated properly so as to comply with treatment standards specified in 40 CFR §268.49 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine & imprisonment".					
E. CONCENTRATION-BASED CERTIFICATION FOR INCINERATION/FUEL SUBSTITUTION RESIDUES					
<input type="checkbox"/> This certification applies to the waste identified above on Form Line No. _____. "I certify under penalty of law that I have personally examined & am familiar with the treatment technology & operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion units as specified in 40 CFR §268.42, Table I. I have been unable to detect the nonwastewater organic constituents, despite having used best good faith efforts to analyze for such constituents. I am aware there are significant penalties for submitting a false certification, including the possibility of fine & imprisonment". <input type="checkbox"/> Check if this waste partially meets treatment standards & list the constituent(s) which require further treatment in section A above.					
F. WASTE TREATED TO REMOVE CHARACTERISTICS (but not UHCs)					
<input type="checkbox"/> This certification applies to the waste identified above on Form Line No. _____. Note: I have identified the underlying hazardous constituents that require further treatment in Section A - Waste Constituent Notification of this form or in Attachment 2. "I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR §268.40 or §268.49 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine & imprisonment".					
G. WASTE TREATED TO REMOVE CHARACTERISTICS & UHCs					
<input type="checkbox"/> This certification applies to the waste identified above on Form Line No. _____. "I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR §268.40 to remove the hazardous characteristic, & that underlying hazardous constituents, as defined in §268.2(i), have been treated on-site to meet the §268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine & imprisonment".					
H. DEBRIS TREATED TO MEET ALTERNATIVE STANDARDS					
<input type="checkbox"/> This certification applies to the waste identified above on Form Line No. _____. "I certify under penalty of law that the debris has been treated in accordance with the requirements of 40 CFR §268.45. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine & imprisonment".					
_____ Generator's Authorized Signature		_____ Name & Title (Printed or Typed)		_____/_____/_____ Date	

SECTION I. UNDERLYING HAZARDOUS CONSTITUENTS (UHC'S)

- Check here if one or more of the constituents listed in Section IV below are reasonably expected to be present as an "Underlying Hazardous Constituent" in the waste. Then in Section IV, check off each constituent. Note that per the definition of UHC in 40 CFR 268.2, fluoride, selenium, sulfides, vanadium and zinc are NOT regulated as UHC's.
- Check here if NONE of the UHC constituents listed in Section IV are expected to be present in the waste.

SECTION II. MULTI-SOURCE LEACHATE (WASTE CODE F039)

- Check here if one or more of the constituents listed in Section IV are present as a constituent in the multi-source leachate (F039) waste. Then in Section IV below, check off each constituent. Note that constituents which are identified by an asterisk (*) are NOT regulated as F039 constituents.
- Check here if NONE of the F039 constituents listed in Section IV are present in the waste.

SECTION III. HAZARDOUS DEBRIS CONTAMINANTS SUBJECT TO TREATMENT (CSTT)

- Check here if one or more of the constituents listed in Section IV is a CSTT for hazardous debris that is intended for treatment using the alternate treatment technologies in 40 CFR 268.45. To identify CSTT's, refer to the "Regulated Hazardous Constituent" column in the Treatment Standard Table in 40 CFR 268.40. Then, in Section IV below, check off the constituents that appear for each waste code used to identify the debris.
- Check here if the entry in the "Regulated Hazardous Constituent" column in the Treatment Standard Table in 40 CFR 268.40 is "Not Applicable", i.e. D001, D002, and D003 (non-cyanides subcategories only).

SECTION IV. LIST OF CONSTITUENTS - INCLUDE MANIFEST LINE ITEM

- | | | | |
|-------------------------------------|---------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------|
| 34. _____ <input type="checkbox"/> | Acenaphthylene | 260. _____ <input type="checkbox"/> | Carbofuran phenol (*) |
| 35. _____ <input type="checkbox"/> | Acenaphthene | 70. _____ <input type="checkbox"/> | Carbon disulfide |
| 36. _____ <input type="checkbox"/> | Acetone | 71. _____ <input type="checkbox"/> | Carbon tetrachloride |
| 37. _____ <input type="checkbox"/> | Acetonitrile | 261. _____ <input type="checkbox"/> | Carbosulfan (*) |
| 38. _____ <input type="checkbox"/> | Acetophenone | 72. _____ <input type="checkbox"/> | Chlordane (alpha and gamma isomers) |
| 39. _____ <input type="checkbox"/> | 2-Acetylaminofluorene | 73. _____ <input type="checkbox"/> | p-Chloroaniline |
| 40. _____ <input type="checkbox"/> | Acrolein | 74. _____ <input type="checkbox"/> | Chlorobenzene |
| 41. _____ <input type="checkbox"/> | Acrylamide (*) | 75. _____ <input type="checkbox"/> | Chlorobenzilate |
| 42. _____ <input type="checkbox"/> | Acrylonitrile | 76. _____ <input type="checkbox"/> | 2-Chloro-1,3-butadiene |
| 251. _____ <input type="checkbox"/> | Aldicarb sulfone (*) | 77. _____ <input type="checkbox"/> | Chlorodibromomethane |
| 43. _____ <input type="checkbox"/> | Aldrin | 78. _____ <input type="checkbox"/> | Chloroethane |
| 44. _____ <input type="checkbox"/> | 4-Aminobiphenyl | 79. _____ <input type="checkbox"/> | bis(2-Chloroethoxy)methane |
| 45. _____ <input type="checkbox"/> | Aniline | 80. _____ <input type="checkbox"/> | bis(2-Chloroethyl)ether |
| 46. _____ <input type="checkbox"/> | Anthracene | 81. _____ <input type="checkbox"/> | Chloroform |
| 47. _____ <input type="checkbox"/> | Antimony | 82. _____ <input type="checkbox"/> | bis(2-Chloroisopropyl)ether |
| 48. _____ <input type="checkbox"/> | Aramite | 83. _____ <input type="checkbox"/> | p-Chloro-m-cresol |
| 49. _____ <input type="checkbox"/> | Arsenic | 84. _____ <input type="checkbox"/> | 2-Chloroethyl vinyl ether (*) |
| 50. _____ <input type="checkbox"/> | alpha-BHC | 85. _____ <input type="checkbox"/> | Chloromethane (Methyl Chloride) |
| 51. _____ <input type="checkbox"/> | beta-BHC | 86. _____ <input type="checkbox"/> | 2-Chloronaphthalene |
| 52. _____ <input type="checkbox"/> | delta-BHC | 87. _____ <input type="checkbox"/> | 2-Chlorophenol |
| 53. _____ <input type="checkbox"/> | gamma-BHC | 88. _____ <input type="checkbox"/> | 3-Chloropropylene |
| 252. _____ <input type="checkbox"/> | Barban (*) | 89. _____ <input type="checkbox"/> | Chromium (Total) |
| 54. _____ <input type="checkbox"/> | Barium | 90. _____ <input type="checkbox"/> | Chrysene |
| 253. _____ <input type="checkbox"/> | Bendiocarb (*) | 91. _____ <input type="checkbox"/> | o-Cresol |
| 255. _____ <input type="checkbox"/> | Benomyl (*) | 92. _____ <input type="checkbox"/> | m-Cresol (difficult to distinguish from p-Cresol) |
| 55. _____ <input type="checkbox"/> | Benzene | 93. _____ <input type="checkbox"/> | p-Cresol (difficult to distinguish from o-Cresol) |
| 56. _____ <input type="checkbox"/> | Benz(a)anthracene | 262. _____ <input type="checkbox"/> | m-Cumenyl methylcarbamate (*) |
| 57. _____ <input type="checkbox"/> | Benzal chloride (*) | 94. _____ <input type="checkbox"/> | Cyanides (Total) |
| 58. _____ <input type="checkbox"/> | Benzo(b)fluoranthene (difficult to distinguish from Benzo(k)fluoranthene) | 95. _____ <input type="checkbox"/> | Cyanides (Amenable) |
| 59. _____ <input type="checkbox"/> | Benzo(k)fluoranthene (difficult to distinguish from Benzo(b)fluoranthene) | 263. _____ <input type="checkbox"/> | Cycloate (*) |
| 60. _____ <input type="checkbox"/> | Benzo(g,h,i)perylene | 96. _____ <input type="checkbox"/> | Cyclohexanone |
| 61. _____ <input type="checkbox"/> | Benzo(a)pyrene | 97. _____ <input type="checkbox"/> | 1,2-Dibromo-3-chloropropane |
| 62. _____ <input type="checkbox"/> | Beryllium | 98. _____ <input type="checkbox"/> | 1,2-Dibromoethane (Ethylene dibromide) |
| 63. _____ <input type="checkbox"/> | Bromodichloromethane | 99. _____ <input type="checkbox"/> | Dibromomethane |
| 64. _____ <input type="checkbox"/> | Bromomethane (Methyl bromide) | 100. _____ <input type="checkbox"/> | 2,4-Dichlorophenoxyacetic acid (2,4-D) |
| 65. _____ <input type="checkbox"/> | 4-Bromophenyl phenyl ether | 101. _____ <input type="checkbox"/> | o,p'-DDD |
| 66. _____ <input type="checkbox"/> | n-Butyl alcohol | 102. _____ <input type="checkbox"/> | p,p'-DDD |
| 256. _____ <input type="checkbox"/> | Butylate (*) | 103. _____ <input type="checkbox"/> | o,p'-DDE |
| 67. _____ <input type="checkbox"/> | Butyl benzyl phthalate | 104. _____ <input type="checkbox"/> | p,p'-DDE |
| 68. _____ <input type="checkbox"/> | 2-sec-Butyl-4,6-dinitrophenol (Dinoseb) | 105. _____ <input type="checkbox"/> | o,p'-DDT |
| 69. _____ <input type="checkbox"/> | Cadmium | 106. _____ <input type="checkbox"/> | p,p'-DDT |
| 257. _____ <input type="checkbox"/> | Carbaryl (*) | 107. _____ <input type="checkbox"/> | Dibenz(a,h)anthracene |
| 258. _____ <input type="checkbox"/> | Carbendazim (*) | 108. _____ <input type="checkbox"/> | Dibenzo(a,e)pyrene |
| 259. _____ <input type="checkbox"/> | Carbofuran (*) | 109. _____ <input type="checkbox"/> | m-Dichlorobenzene |
| | | 110. _____ <input type="checkbox"/> | o-Dichlorobenzene |
| | | 111. _____ <input type="checkbox"/> | p-Dichlorobenzene |

- | | |
|-------------------------------------------------------------------|----------------------------------------------------------------------|
| 112. _____ [] Dichlorodifluoromethane | 176. _____ [] Methapyrilene |
| 113. _____ [] 1,1-Dichloroethane | 272. _____ [] Methiocarb (*) |
| 114. _____ [] 1,2-Dichloroethane | 273. _____ [] Methomyl (*) |
| 115. _____ [] 1,1-Dichloroethylene | 177. _____ [] Methoxychlor |
| 116. _____ [] trans-1,2-Dichloroethylene | 178. _____ [] 3-Methylcholanthrene |
| 117. _____ [] 2,4-Dichlorophenol | 179. _____ [] 4,4-Methylene-bis(2-chloroaniline) |
| 118. _____ [] 2,6-Dichlorophenol | 180. _____ [] Methylene chloride |
| 119. _____ [] 1,2-Dichloropropane | 181. _____ [] Methyl ethyl ketone |
| 120. _____ [] cis-1,3-Dichloropropylene | 182. _____ [] Methyl isobutyl ketone |
| 121. _____ [] trans-1,3-Dichloropropylene | 183. _____ [] Methyl methacrylate |
| 122. _____ [] Dieckrin | 184. _____ [] Methyl methansulfonate |
| 123. _____ [] Diethyl phthalate | 185. _____ [] Methyl parathion |
| 124. _____ [] 2,4-Dimethyl phenol | 274. _____ [] Metolcarb (*) |
| 125. _____ [] Dimethyl phthalate | 275. _____ [] Mexacarbate (*) |
| 126. _____ [] Di-n-butyl phthalate | 276. _____ [] Molinate (*) |
| 127. _____ [] 1,4-Dinitrobenzene | 186. _____ [] Naphthalene |
| 128. _____ [] 4,6-Dinitro-o-cresol | 187. _____ [] 2-Naphthylamine |
| 129. _____ [] 2,4-Dinitrophenol | 188. _____ [] Nickel |
| 130. _____ [] 2,4-Dinitrotoluene | 189. _____ [] o-Nitroaniline (*) |
| 131. _____ [] 2,6-Dinitrotoluene | 190. _____ [] p-Nitroaniline |
| 132. _____ [] Di-n-octyl phthalate | 191. _____ [] Nitrobenzene |
| 133. _____ [] p-Dimethylaminoazobenzene (*) | 192. _____ [] 5-Nitro-o-toluidine |
| 134. _____ [] Di-n-propylnitrosoamine | 193. _____ [] o-Nitrophenol (*) |
| 135. _____ [] 1,4-Dioxane (*) | diphenylnitrosamine) |
| 136. _____ [] Diphenylamine (difficult to distinguish from | 194. _____ [] p-Nitrophenol |
| 137. _____ [] Diphenylnitrosamine (difficult to distinguish from | 195. _____ [] N-Nitrosodiethylamine |
| diphenylamine) | 196. _____ [] N-Nitrosodimethylamine |
| 138. _____ [] 1,2-Diphenylhydrazine | 197. _____ [] N-Nitroso-di-n-butylamine |
| 139. _____ [] Disulfoton | 198. _____ [] N-Nitrosomethylethylamine |
| 266. _____ [] Dithiocarbamates (Total) (*) | 199. _____ [] N-Nitrosomorpholine |
| 140. _____ [] Endosulfan I | 200. _____ [] N-Nitrosopiperidine |
| 141. _____ [] Endosulfan II | 201. _____ [] N-Nitrosopyrrolidine |
| 142. _____ [] Endosulfan sulfate | 277. _____ [] Oxamyl (*) |
| 143. _____ [] Endrin | 202. _____ [] Parathion |
| 144. _____ [] Endrin aldehyde | 203. _____ [] Total PCBs (sum of all PCB isomers, or all Arochlors) |
| 267. _____ [] EPTC (*) | 278. _____ [] Pebulate (*) |
| 145. _____ [] Ethyl acetate | 204. _____ [] Pentachlorobenzene |
| 146. _____ [] Ethyl cyanide (propanenitrile) | 205. _____ [] PeCDDs (All pentachlorodibenzo- p-dioxins) |
| 147. _____ [] Ethyl benzene | 206. _____ [] PeCDFs (All pentachlorodibenzofurans) |
| 148. _____ [] Ethyl ether | 207. _____ [] Pentachloroethane (*) |
| 149. _____ [] bis(2-Ethylhexyl)phthalate | 208. _____ [] Pentachloronitrobenzene |
| 150. _____ [] Ethyl methacrylate | 209. _____ [] Pentachlorophenol |
| 151. _____ [] Ethylene oxide | 210. _____ [] Phenacetin |
| 152. _____ [] Famphur | 211. _____ [] Phenanthrene |
| 153. _____ [] Fluoranthene | 212. _____ [] Phenol |
| 154. _____ [] Fluorene | 213. _____ [] Phorate |
| 155. _____ [] Fluoride | 214. _____ [] Phthalic acid (*) |
| 268. _____ [] Formetanate hydrochloride (*) | 215. _____ [] Phthalic anhydride |
| 156. _____ [] Heptachlor | 280. _____ [] Physostigmine (*) |
| 157. _____ [] Heptachlor epoxide | 281. _____ [] Physostigmine salicylate (*) |
| 158. _____ [] Hexachlorobenzene | 282. _____ [] Promecarb (*) |
| 159. _____ [] Hexachlorobutadiene | 216. _____ [] Pronamide |
| 160. _____ [] Hexachlorocyclopentadiene | 283. _____ [] Propham (*) |
| 161. _____ [] HxCDDs (All hexachlorodibenzo-p-dioxins) | 284. _____ [] Propoxur (*) |
| 162. _____ [] HxCDFs (All hexachlorodibenzo-furans) | 285. _____ [] Prosulfocarb (*) |
| 163. _____ [] Hexachloroethane | 217. _____ [] Pyrene |
| 164. _____ [] Hexachloropropylene | 218. _____ [] Pyridine |
| 165. _____ [] Indeno (1,2,3-c,d)pyrene | 219. _____ [] Safrole |
| 270. _____ [] 3-Iodo-2-propynyl n-butylcarbamate (*) | 220. _____ [] Selenium |
| 166. _____ [] Iodomethane | 221. _____ [] Silver |
| 167. _____ [] Isobutyl alcohol | 222. _____ [] Silvex (2,4,5-TP) |
| 168. _____ [] Isodrin | 223. _____ [] Sulfide |
| 169. _____ [] Isosafrole | 224. _____ [] 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) |
| 170. _____ [] Kepone | 225. _____ [] 1,2,4,5-Tetrachlorobenzene |
| 171. _____ [] Lead | 226. _____ [] TCDDs (All tetrachlorodibenzo- p-dioxins) |
| 172. _____ [] Mercury--Nonwastewater from Retort | 227. _____ [] TCDFs (All tetrachlorodibenzofurans) |
| 173. _____ [] Mercury--All others | 228. _____ [] 1,1,1,2-Tetrachloroethane |
| 174. _____ [] Methacrylonitrile | 229. _____ [] 1,1,2,2-Tetrachloroethane |
| 175. _____ [] Methanol | 230. _____ [] Tetrachloroethylene |

- | | | | |
|-------------------------------------|-----------------------------|-------------------------------------|--------------------------------------------------------------------|
| 231. _____ <input type="checkbox"/> | 2,3,4,6-Tetrachlorophenol | 241. _____ <input type="checkbox"/> | 2,4,5-Trichlorophenol |
| 232. _____ <input type="checkbox"/> | Thallium | 242. _____ <input type="checkbox"/> | 2,4,6-Trichlorophenol |
| 286. _____ <input type="checkbox"/> | Thiodicarb (*) | 243. _____ <input type="checkbox"/> | 1,2,3-Trichloropropane |
| 287. _____ <input type="checkbox"/> | Thiophanate-methyl (*) | 244. _____ <input type="checkbox"/> | 1,1,2-Trichloro-1,2,2-trifluoroethane |
| 233. _____ <input type="checkbox"/> | Toluene | 290. _____ <input type="checkbox"/> | Triethylamine (*) |
| 234. _____ <input type="checkbox"/> | Toxaphene | 245. _____ <input type="checkbox"/> | tris-(2,3-Dibromopropyl)phosphate |
| 289. _____ <input type="checkbox"/> | Triallate (*) | 246. _____ <input type="checkbox"/> | Vanadium (*) |
| 235. _____ <input type="checkbox"/> | Tribromomethane (Bromoform) | 291. _____ <input type="checkbox"/> | Vernolate (*) |
| 236. _____ <input type="checkbox"/> | 1,2,4-Trichlorobenzene | 247. _____ <input type="checkbox"/> | Vinyl chloride |
| 237. _____ <input type="checkbox"/> | 1,1,1-Trichloroethane | 248. _____ <input type="checkbox"/> | Xylenes—mixed isomers (sum of o-, m-, and p-xylene concentrations) |
| 238. _____ <input type="checkbox"/> | 1,1,2-Trichloroethane | 249. _____ <input type="checkbox"/> | Zinc (*) |
| 239. _____ <input type="checkbox"/> | Trichloroethylene | | |
| 240. _____ <input type="checkbox"/> | Trichloromonofluoromethane | | |

KEY TERMS/DEFINITIONS

CONTAMINANTS SUBJECT TO TREATMENT (CSTT) are the specific constituents listed by waste code number in the Treatment Standard Table in §268.40. CSTT's must be identified for all hazardous debris wastes that are intended for treatment using one of the hazardous debris alternate treatment technologies described in §268.45.

REASONABLY EXPECTED TO BE PRESENT means that the generator is relying on knowledge of the raw materials used, the process, and potential reaction products, or on the results of a one-time analysis for the entire list of UHC's that may be present in the untreated hazardous waste. If a one-time analysis of the entire list of UHC's is conducted, subsequent analyses are required for only those pollutants which would reasonably be expected to be present in the waste as generated, based on the previous sampling and analysis results.

UNDERLYING HAZARDOUS CONSTITUENT (UHC) means any constituent listed in §268.48 Table UTS - Universal Treatment Standards (except fluoride, selenium, sulfides, vanadium and zinc) which can reasonably be expected to be present at the point of generation of the hazardous waste, at a concentration above the constituent-specific UTS treatment standard. [See 40 CFR 268.2]

SECTION IV. OTHER LISTED WASTES (F006-12, F019-F028, F037-38, F039, K-, U-, AND P-CODES)
CONTINUED FROM PAGE 3 OF FORM LDR-1

COLUMN 1: LINE ITEM SEE MANIFEST	COLUMN 2: WASTE CODE / SUBCATEGORY	COLUMN 3: WASTEWATER/ NON-WASTEWATER	COLUMN 4: HANDLING CODE			
			3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6
_____	_____	<input type="checkbox"/> WW <input type="checkbox"/> Non-WW	3	4	5	6

EXHIBIT G

ASH MANAGEMENT SOP

Clean Harbors Colfax, LLC

LAD 0981055791, AI 32096

Clean Harbors Colfax, LLC

**Standard Operating Procedure
Ash Management**

1.0 Purpose/Scope:

- 1.1 To ensure the proper management of ash and residues in accordance with the facility's operating permit, applicable hazardous waste management regulations, and company policy.

2.0 Procedure:

- 2.1 All ash and residue from the burners will be collected and appropriately stored on-site pending off-site disposal.
- 2.2 Ash collected from waste burners 1-9 and 11-19 will be considered nonhazardous only after verification through sampling and analysis
Each roll off container of ash residue will be sampled and analyzed for the list of analytes shown on Table 1 of the WAP. This list was prepared based on a profile constituent review of the waste receipts for the last 2 years. These analytes are also listed in LAC 33:V.2299, Table 7.
- 2.3 The sampling procedure will be as described in the Waste Analysis Plan:
- 2.3.1 Three samples will be taken from each roll off to be shipped.
- 2.3.2 Samples will be collected as the roll off container is filled and held for final analysis.
- 2.3.3 The first sample will be collected from the ash surface near one end of the container; the second sample will be collected from the middle of the container at mid depth of the ash; and the third sample will be collected from the opposite end of the container near the bottom.
- 2.4 Ash collected from waste burners 10 and 20 will be considered hazardous since listed wastes are thermally treated in these burners.
- 2.5 Each container of ash and residue from these burners will also be analyzed for the parameters listed in Section 2.3 of this procedure.
- 2.6 The EPA waste codes associated with these materials will be all those listed wastes that have been thermally treated in the burners since the time they were last replaced. These waste codes can be determined by reviewing the incoming manifests and daily operating records for each unit.
- 2.7 During the time while ash and residue are being accumulated on-site, the following standards will apply
- 2.7.1 The residue resulting from the listed waste burners will be accumulated for not longer than 3 days once the quantity reaches 55 gallons of hazardous waste (or 1 quart of acutely hazardous waste (P-listed)) outside the permitted storage unit and up to 365 days within the permitted

storage unit. During this time, each container will be marked and managed as hazardous waste and will remain closed at all times except when necessary to add waste to or remove waste from the container.

- 2.7.2 The residue resulting from the burners in which only D003 wastes were managed will be accumulated in containers such as a roll off that will remain covered as long as they are stored in areas that protect them from accumulating precipitation. It will be assumed that these materials are non-hazardous, only after the analytical results suggest otherwise. In the event that the analytical results do indicate that the material is hazardous, the affected container(s) will immediately be identified with completed hazardous waste labels. Arrangements for off-site shipment will be made in due course, but under no circumstances should the material be allowed to remain on site for longer than those time constraints identified previously for hazardous waste.
- 2.8 Shipments of ash and residue must be accompanied by the appropriate paperwork, generally consisting of a hazardous waste manifest and an LDR form (as needed). Nonhazardous waste shipments may be shipped on a bill of lading.
- 2.9 Records of all shipments must be maintained in the operating record for the facility. In the case of hazardous waste shipments, complete information regarding the amount generated and other information related to the off-site management of the material must be included in the facility's annual hazardous waste report.

SOP Management:

This SOP should be reviewed annually for consistency with the facility's permit, applicable regulations, and company policy. Any changes to this policy or deviations from the policy should immediately be conveyed to the management of the facility and the compliance manager.

EXHIBIT H

PROCESS FLOW DIAGRAM

Clean Harbors Colfax, LLC

LAD 0981055791, AI 32096

Exhibit H

**Clean Harbors Colfax, LLC
Process Flow Diagram**

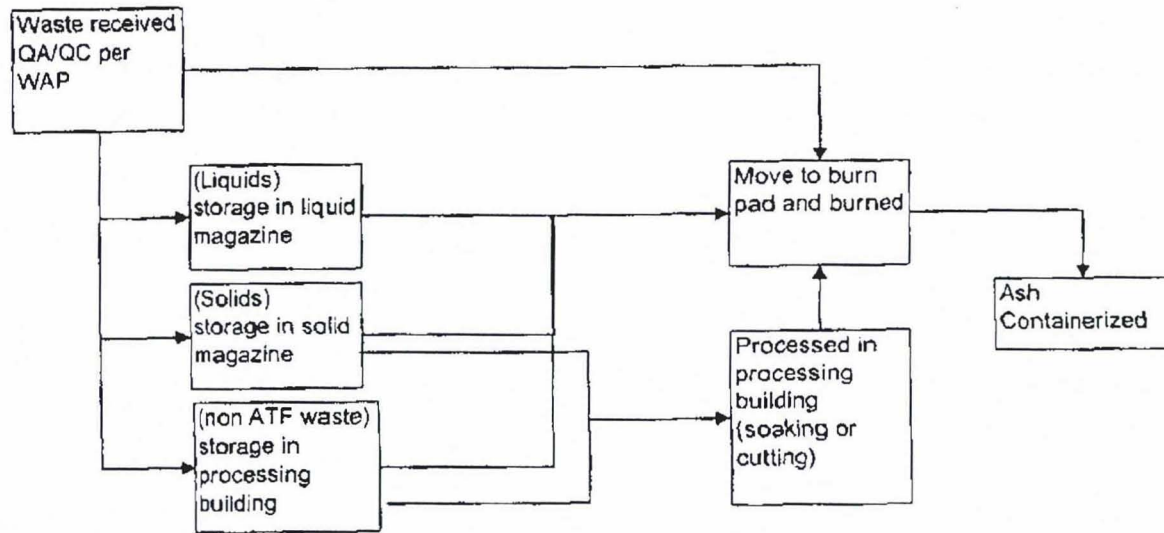


EXHIBIT I

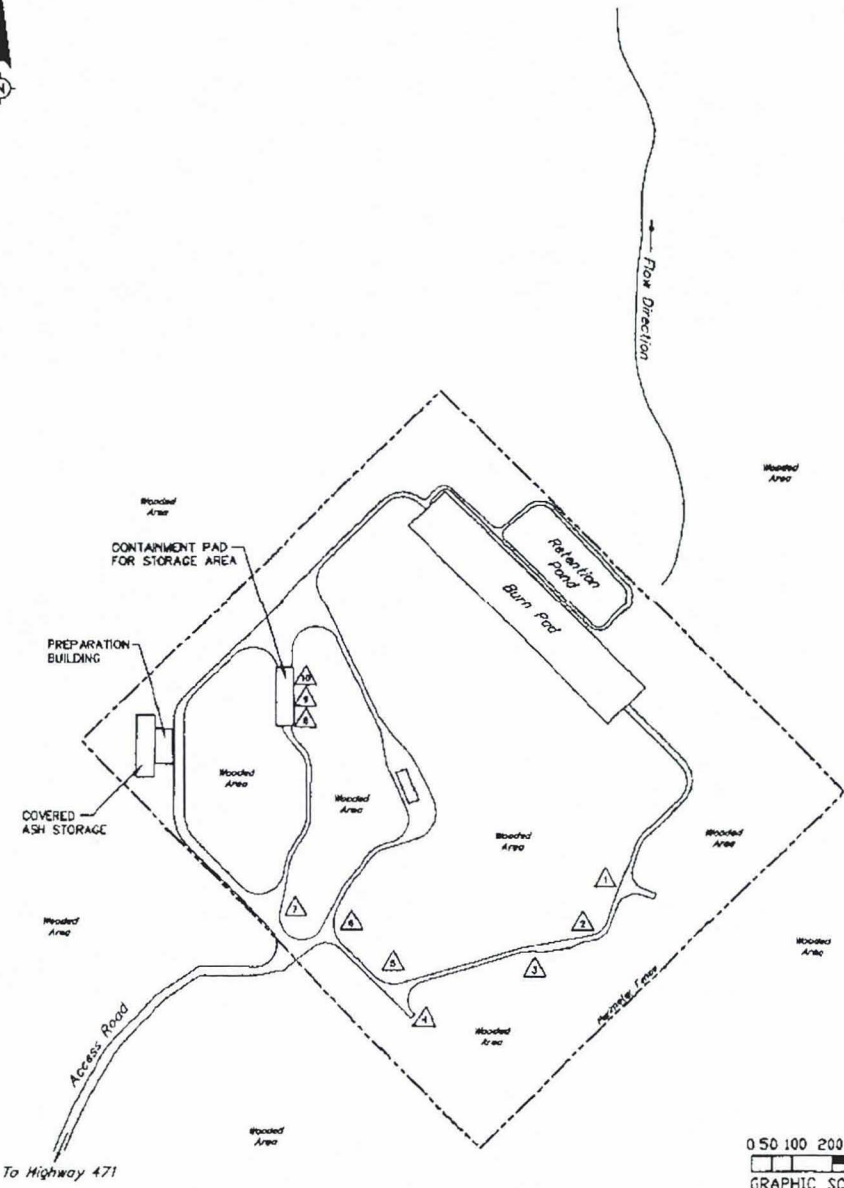
MATERIALS MANAGEMENT AREAS

Clean Harbors Colfax, LLC

LAD 0981055791, AI 32096



LEGEND
 STORAGE MAGAZINE



A	RCRA PART B Response	K.M.C.M.C.C.	4/1/20
REV.	DESCRIPTION	DATE	BY
CleanHarbors ENVIRONMENTAL SERVICES 42 Longwater Drive Norwell, Massachusetts 02061 Telephone (781) 792-5000			
CLEAN HARBORS COLFAX, LLC 3763 HIGHWAY 471 COLFAX, LOUISIANA 71417			
MATERIALS MANAGEMENT AREAS			
PROJECT NO. CFFACGENRC		DRAWING NO.	
SCALE AS NOTED		CFFACGENRC-C-02	

EXHIBIT J

LABORATORY ACCREDITATION

Clean Harbors Colfax, LLC

LAD 0981055791, AI 32096



STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Is hereby granting a Louisiana Environmental Laboratory Accreditation to



Environmental Enterprises USA Inc
58485 Pearl Acres Rd St D
Slidell, Louisiana 70461

Agency Interest No. 26253

According to the Louisiana Administrative Code, Title 33, Part I, Subpart 3, LABORATORY ACCREDITATION, the State of Louisiana formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed in the attachment.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part I, Subpart 3 requirements and agrees to adapt to any changes in the requirements. It also acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part I and the 2009 TNI Standard by which the laboratory was assessed. Please contact the Department of Environmental Quality, Louisiana Environmental Laboratory Accreditation Program (LELAP) to verify the laboratory's scope of accreditation and accreditation status.

Accreditation by the State of Louisiana is not an endorsement or a guarantee of validity of the data generated by the laboratory. To be accredited initially and maintain accreditation, the laboratory agrees to participate in two single-blind, single-concentration PT studies, where available, per year for each field of testing for which it seeks accreditation or maintains accreditation as required in LAC 33:I.4711.

Lourdes Iturralde, Administrator
Notifications and Accreditations Section
Public Participation and Permit Support Services Division

Certificate Number: 02027

Expiration Date: June 30, 2015
Issued On: July 1, 2014



STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Is hereby granting a Louisiana Environmental Laboratory Accreditation to



TestAmerica Mobile
3355 McLemore Dr
Pensacola, Florida 32514

Agency Interest No. 30673

According to the Louisiana Administrative Code, Title 33, Part I, Subpart 3, LABORATORY ACCREDITATION, the State of Louisiana formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed in the attachment.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part I, Subpart 3 requirements and acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part I. Please contact the Department of Environmental Quality, Louisiana Environmental Laboratory Accreditation Program (LELAP) to verify the laboratory's scope of accreditation and accreditation status.

Accreditation by the State of Louisiana is not an endorsement or a guarantee of validity of the data generated by the laboratory. To be accredited initially and maintain accreditation, the laboratory agrees to participate in two single-blind, single-concentration PT studies, where available, per year for each field of testing for which it seeks accreditation or maintains accreditation as required in LAC 33:L4711.

Lourdes Iturralde, Administrator
Notifications and Accreditations Section
Public Participation and Permit Support Services Division

Certificate Number: 01992

Expiration Date: June 30, 2014
Issued On: July 1, 2013



STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Is hereby granting a Louisiana Environmental Laboratory Accreditation to



Accutest Laboratories Southeast Inc
4405 Vineland Rd Ste C-15
Orlando, Florida 32811

Agency Interest No. 38582

According to the Louisiana Administrative Code, Title 33, Part I, Subpart 3, LABORATORY ACCREDITATION, the State of Louisiana formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed in the attachment.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part I, Subpart 3 requirements and agrees to adapt to any changes in the requirements. It also acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part I and the 2009 TNI standards by which the laboratory was assessed. Please contact the Department of Environmental Quality, Louisiana Environmental Laboratory Accreditation Program (LELAP) to verify the laboratory's scope of accreditation and accreditation status.

Accreditation by the State of Louisiana is not an endorsement or a guarantee of validity of the data generated by the laboratory. To be accredited initially and maintain accreditation, the laboratory agrees to participate in two single-blind, single-concentration PT studies, where available, per year for each field of testing for which it seeks accreditation or maintains accreditation as required in LAC 33:I.4711.

Lourdes Iturralde, Administrator
Notifications and Accreditations Section
Public Participation and Permit Support Services Division

Certificate Number: 03051

Expiration Date: June 30, 2015
Issued On: July 1, 2014



STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY



Is hereby granting a Louisiana Environmental Laboratory Accreditation to

TestAmerica Denver
4955 Yarrow St
Arvada, Colorado 80002
Agency Interest No. 30785

According to the Louisiana Administrative Code, Title 33, Part I, Subpart 3, LABORATORY ACCREDITATION, the State of Louisiana formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed in the attachment.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part I, Subpart 3 requirements and agrees to adapt to any changes in the requirements. It also acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part I and the 2009 TNI Standard by which the laboratory was assessed. Please contact the Department of Environmental Quality, Louisiana Environmental Laboratory Accreditation Program (LELAP) to verify the laboratory's scope of accreditation and accreditation status.

Accreditation by the State of Louisiana is not an endorsement or a guarantee of validity of the data generated by the laboratory. To be accredited initially and maintain accreditation, the laboratory agrees to participate in two single-blind, single-concentration PT studies, where available, per year for each field of testing for which it seeks accreditation or maintains accreditation as required in LAC 33:1.4711.

Lourdes Iturralde, Administrator
Notifications and Accreditations Section
Public Participation and Permit Support Services Division

Certificate Number: 02096

Expiration Date: June 30, 2015
Issued On: July 1, 2014



STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Is hereby granting a Louisiana Environmental Laboratory Accreditation to



Accutest Gulf Coast Laboratory Louisiana
500 Ambassador Caffery Pkwy
Scott, Louisiana 70583-8544

Agency Interest No. 24751

According to the Louisiana Administrative Code, Title 33, Part I, Subpart 3, LABORATORY ACCREDITATION, the State of Louisiana formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed in the attachment.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part I, Subpart 3 requirements and agrees to adapt to any changes in the requirements. It also acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part I and the 2009 TNI Standard by which the laboratory was assessed. Please contact the Department of Environmental Quality, Louisiana Environmental Laboratory Accreditation Program (LELAP) to verify the laboratory's scope of accreditation and accreditation status.

Accreditation by the State of Louisiana is not an endorsement or a guarantee of validity of the data generated by the laboratory. To be accredited initially and maintain accreditation, the laboratory agrees to participate in two single-blind, single-concentration PT studies, where available, per year for each field of testing for which it seeks accreditation or maintains accreditation as required in LAC 33:I.4711.

Lourdes Iturralde, Administrator
Notifications and Accreditations Section
Public Participation and Permit Support Services Division

Certificate Number: 02048

Expiration Date: June 30, 2015
Issued On: July 1, 2014