Bryan W. Shaw, Ph.D., P.E., *Chairman*Toby Baker, *Commissioner*Jon Niermann, *Commissioner*Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 21, 2015

MS GINA MCCARTHY
ADMINISTRATOR
US ENVIRONMENTAL PROTECTION AGENCY
HEADQUARTERS
ARIEL RIOS BLDG
1200 PENNSYLVANIA AVE NW
WASHINGTON DC 20460

Re: Executive Director's Response to EPA Order on Petitions VI-2014-04 and VI-2014-05

Permit Numbers: O1668 and O1669 Shell Chemical LP and Shell Oil Company

Oxygenated Solvents Production Unit and Petroleum Refining

Deer Park, Harris County

Regulated Entity Number: RN100211879 Customer Reference Number: CN601542012

Dear Ms. McCarthy:

On September 24, 2015, the U.S. Environmental Protection Agency (EPA) signed an order (Order) granting portions of a petition filed by Environmental Integrity Project objecting to the effective Federal Operating Permit (FOP) Numbers O1668 and O1669 for Shell Chemical LP and Shell Oil Company, that were issued on April 1, 2014.

In accordance with Title 30 Texas Administrative Code § 122.360 (30 TAC § 122.360), the Texas Commission on Environmental Quality (TCEQ) must resolve any objection and issue a revised permit that satisfies EPA's objection.

The TCEQ has completed its technical review of the order and offers the enclosed responses to facilitate resolution. The attached responses to the order describe the changes that will be made to the permit records and/or permits and supporting statements of basis (SOB) during the next permit revisions.

Consistent with Title 30 TAC § 122.360, please provide an indication of your acceptance or assessment of the responses and resolutions to the granted portions of the petition as soon as possible.

Ms. Gina McCarthy Page 2 December 21, 2015

Thank you for your cooperation in this matter. If you have any other questions, please contact Ms. Camilla Widenhofer (512) 239-1028.

Sincerely,

Michael Wilson, P.E., Director Air Permits Division Office of Air Texas Commission on Environmental Quality

MPW/cw

cc: Mr. Derrick Stanley, Staff Environmental Specialist, Shell Oil Products Company LLC, Deer Park

Mr. Brett D. Woltjen, Production Manager, Shell Oil Company, Deer Park

Director, Harris County, Pollution Control Services, Pasadena

Mr. John M. Minter, Staff Attorney, TCEQ

Ms. Amy L. Browning, Staff Attorney, TCEQ

Air Section Manager, Region 12 – Houston

Air Permit Section Chief, U.S. Environmental Protection Agency, Region 6, Dallas

Enclosures: Executive Director's Response to EPA Order Active PBR Inventory

Project Number: 13765 and 13617

EXECUTIVE DIRECTOR'S RESPONSE TO EPA ORDER

The Texas Commission on Environmental Quality (TCEQ or commission) Executive Director (ED) provides this Response to an EPA Order as a result of a public petition on the Shell Chemical LP and Shell Oil Company, effective Federal Operating Permit (FOP) Nos. 01668 and 01669. As required by Title 30 Texas Administrative Code § 122.360 (30 TAC § 122.360) the permits remain effective and the ED shall have 90 days from the receipt of an EPA objection to resolve any objection and, if necessary, terminate or revise the permit. The comments included in the public petition and EPA objections are summarized in this response.

BACKGROUND

Procedural Background

The Texas Operating Permit Program requires that owners and operators of sites subject to 30 TAC Chapter 122 obtain a FOP that contains all applicable requirements in order to facilitate compliance and improve enforcement. The FOP does not authorize construction or modifications to facilities, nor does the FOP authorize emission increases. In order to construct or modify a facility, the facility must have the appropriate new source review authorization. If the site is subject to 30 TAC Chapter 122, the owner or operator must submit a timely FOP application for the site, and ultimately must obtain the FOP in order to operate.

Shell Chemical LP applied to the TCEQ for a FOP renewal for a petroleum refining plant located in Deer Park, Harris County on April 15, 2009, and notice was published on June 14, 2012. The public comment period ended on May 16, 2012. Comments were received from Environmental Integrity Project and Sierra Club on July 16, 2012.

Shell Oil Company applied to the TCEQ for a FOP renewal for a Petroleum Refining plant located in Deer Park, Harris County on May 20, 2009, and notice was published on June 14, 2012. The public comment period ended on May 16, 2012. Comments were received from Environmental Integrity Project and Sierra Club on July 16, 2012.

TCEQ sent the proposed draft permits and response to comments to EPA on January 30, 2014. EPA did not object to the proposed draft permits which were issued by TCEQ on April 1, 2014. The 60 day petition period extended until May 20, 2014. On May 19, 2014, a public petition was submitted to EPA by the Environmental Integrity Project, Sierra Club, and Air Alliance Houston. On September 24, 2014, EPA issued an order partially granting and partially denying the petition. In accordance with state and federal rules, the petition does not limit the effectiveness of the issued FOP.

TCEQ is responding to the order by sending the ED Response to the Order and will be revising the permit records and/or permits statements of basis (SOB) during the next permit revision action.

Description of Site

Shell Chemical LP's Deer Park Chemical Plant is primarily engaged in the production of olefins, heavy olefins, aromatics, phenol and acetone. These base chemicals or raw material chemicals are typically sold to other chemical companies that transform them into thousands of consumer products ranging from plastics to building materials. These products are transferred via pipeline, marine loading, and rail and tank truck loading.

Shell Oil Company's Deer Park Refining is primarily engaged in the production of fuels derived from various crude oils or unfinished petroleum derivatives. The primary products made in the refinery include gasoline, aviation fuels, ship and utility fuels, heating oil/diesel fuels, petroleum coke, and chemical feedstocks. To produce the required quality and quantity of fuels products, crude oil must undergo several processing steps (units). These processing steps can be grouped into the following categories: distillation, conversion, and treating.

Claim 2. The Proposed Permits' IBR of PBR Requirements Fails to Assure Compliance.

The title V permit should be "clear and unambiguous as to how the emission limits apply to particular emission units." Therefore, Title V permits should identify PBR authorizations that are applicable to individual emission units and other PBR authorizations that are site-wide. The Statement of Basis for both permits explains that some applicable requirements are site-wide requirements. Finally, the New Source Review Authorization Reference table appears to list all PBRs that are applicable to the "Application Area" but it is unclear if all these PBRs are still applicable to the sources.

Neither the Proposed Permit Statement of Basis, nor the RTC document for either the Chemical Plant or the Refinery clearly explained the purpose of the New Source Review Authorization Reference table or how the table related to the New Source Review Authorization Reference by Emission Unit table. Therefore, the Petitioners demonstrated that the permit record did not establish whether the PBRs specified in the Petition apply to any particular emission units or apply site-wide.

The EPA directs the TCEQ to identify which PBRs apply to which emission units and which PBRs apply generally or site-wide for both the Chemical Plant and the Refinery. Once TCEO identifies which PBRs apply to which emission units, TCEQ is directed to revise the permit and/or the permit record to ensure the permit itself is clear as to this point. The permit record should explain the purpose of the New Source Review Authorization References table and New Source Review Authorization References by Emission Unit table. Moreover, the TCEO should ensure that the Chemical Plant and Refinery title V permits include all current PBRs authorized at the source and do not reference minor NSR permits or PBRs that may no longer be applicable. The EPA does not agree with the TCEQ's interpretation that White Paper Number 1 and White Paper Number 2 support the practice of not listing in the Title V permit those emission units to which generic requirements apply. As both White Papers state, such an approach is only appropriate where the emission units subject to generic requirements can be unambiguously defined without a specific listing and such requirements are enforceable. Thus, not listing emission units for PBRs that apply site-wide may be appropriate in some cases. However, for other PBRs that apply to multiple and different types of emission units and pollutants, the Proposed Permits should specify to which units and pollutants those PBRs apply. Further, PBRs are applicable requirements for title V purposes. The TCEQ·s interpretation of how White Paper Number 1 and White Paper Number 2 would apply to insignificant emission units does not inform how PBR requirements must be addressed in a title V permit. See, e.g., 30 TAC 122.1 0(2)(H). The TCEQ should provide a list of emission units for which only general requirements are applicable, and if an emission unit is considered insignificant, it should be identified in the Statement of Basis as such. The TCEQ must revise the permits accordingly to address the ambiguity surrounding PBRs.

Additionally, the TCEQ should ensure that the Title V permit is clear and unambiguous as to how the emissions limits apply to particular emission units.

Response to Claim 2.

It has been longstanding TCEQ policy to not list specific emission units in the Title V permit where the sole applicable requirement is the underlying New Source Review (NSR) Authorization as stated under the Reading State of Texas's Federal Operating Permit section of the Statement of Basis document. The Executive Director notes that EPA has approved the incorporation by reference (IBR) for minor NSR requirements including PBRs in the Title V permit. However for clarity and as directed in the Petition order, the Executive Director (ED) provides the attached list of all emission units that are authorized by PBRs listed in the NSR Authorization Reference Tables in Title V permits O1668 and O1669. The ED also further clarifies the use of PBRs as follows:

The site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The New Source Review Authorization References table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site: www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following Web site: www.tceq.texas.gov/permitting/air/permitbyrule/historical rules/oldselist/se index.html

Texas Commission on Environmental Quality (TCEQ) regulates facilities that release air contaminants, even in small amounts, under its air permit rules. Facilities with emissions that do not meet de minimis criteria but will not make a significant contribution of air contaminants to the atmosphere may be permitted by rule (PBR). All PBRs are adopted by the commission in accordance with Texas Administrative Procedure Act rulemaking requirements and are found in 30 TAC Chapter 106. Facilities authorized by PBR must be constructed and operated with certain restrictions.

A PBR may be utilized as an authorization mechanism when both the following conditions are met: 1. The facility meets all applicable requirements of 30 TAC § 106.4. These requirements limit the amount of annual emissions to less than federal permit major source levels, and require compliance with all state and federal regulations; and 2. The facility meets all applicable conditions of one or more individual PBRs contained in 30 TAC Chapter 106. These requirements may specify design requirements for certain facilities, production or material use limits, and operational restrictions. Some PBRs do not require registration and can simply be claimed. These PBRs will not appear in TCEQ's NSR database. However, the company must keep sufficient records to demonstrate compliance with the PBR and must include it in the SOP for SOP PBR list.

Certain PBRs require registration with TCEQ as stated in the specific PBR. Other PBRs are not required to be registered with TCEQ. In either case, the permit holder must maintain sufficient records to demonstrate compliance with the annual emissions limits specified in 30 TAC § 106 and maintain sufficient records to demonstrate compliance with the emission limits and specific conditions of the PBR.

Permit holders may also certify emissions in a PBR registration to establish federally enforceable emission limits below the emission limits of 30 TAC § 106.4 which establishes limits for production and planned MSS for each facility (piece of equipment) to 250 tons per year (tpy) Nitrogen Oxides (NOx) and Carbon Monoxide (CO); 25 tpy Volatile Organic Compounds (VOC), Particulate Matter (PM), Sulfur Dioxide (SO2), and any other contaminant (except water, nitrogen, ethane, hydrogen, oxygen, and greenhouse gases); 15 tpy of particulate matter with

diameters of 10 microns or less (PM_{10}) ; or 10 tpy of particulate matter with diameters of 2.5 microns or less $(PM_{2.5})$.

PBR registrations may be certified to demonstrate that emission allowables for each facility claimed under the PBR are less than the netting or major source trigger levels under the PSD and NNSR programs. Certifications are also required for sites subject to NOx cap and trade programs under 30 TAC Chapter 101 and for ensuring that any PBR claims do not exceed permitted flexible caps for facilities permitted under 30 TAC Chapter 116, Subchapter G.

As referenced in 30 TAC 116.116(d)(2), all changes authorized under Chapter 106 to a permitted facility shall be incorporated into the NSR Permit when it is amended or renewed. For PBRs that are registered with TCEQ, copies of the registration letters may be viewed through the Remote Document Server (RDS) at https://webmail.tceq.state.tx.us/gw/webpub. PBR registrations that are certified will have the specific maximum permitted allowables for each facility attached to the registration letter.

The ED provides the following explanation of the relationship between the NSR Authorization References Table and the NSR Authorization References by Emission Unit Table.

The NSR Authorization Table is a list of all NSR authorizations including PBRs for the permit area as explained under the New Source Review Requirements section of the Statement of Basis. This table is a catalog of all NSR permits which can be used by the TCEQ, EPA, and the public to reference in a single tabular format. As explained in the Statement of Basis, the reader may access these permits in the TCEQ Central File Room. The permits may also be accessed through the TCEQ Remote Document Server (RDS) at https://webmail.tceq.state.tx.us/gw/webpub

The Executive Director agrees that it is helpful to explain the purpose of the NSR Authorization by Emissions Unit Table in the permit through the Statement of Basis document. This table's purpose is to list the specific NSR authorizations for emission units that appear elsewhere in the permit such as the Unit Summary Table, Applicable Requirements Summary Table, Additional Monitoring Summary tables, and the Permit Shield Table. The table also lists a unit description for the emission unit ID numbers in the permit. As stated above, the ED has provided a list of the specific emission units in the permit areas authorized by PBRs which will be incorporated in the Title V permit's NSR Authorization References by Emissions Unit Table at the next permit action.

The ED does not agree that all emission units with general requirements are required to be listed in the Title V permit as EPA has approved site-wide opacity limits under 30 TAC Chapter 111 to be listed in the permit without identifying the specific emission points that are subject to these limits. The Statement of Basis provides a non-inclusive list of sources that are considered to be insignificant activities that are not required to be listed in the permit application. The ED sees no benefit to provide a list of the specific emission sources that are considered to be insignificant activities as they are not required to be listed in the permit application.

Claim 3.B. The Chemical Plant Proposed Permit Fails to Assure Compliance with Permit Limits for PM10 Emissions from Pyrolysis Furnaces Authorized by Permit No. 3219/PSDTX974.

In responding to this order, the TCEQ is directed to identify the monitoring, recordkeeping, and reporting to be used to assure compliance with the PM_{10} emission limits for the pyrolysis furnaces. If the Chemical Plant Proposed Permit does not currently contain requirements that assure compliance with the PM10 emission limits, the TCEQ must add such requirements. Further, The TCEQ must document the rationale for how those monitoring requirements assure compliance with applicable requirements as required by 42 U.S.C. § 766 lc(c) and 40 C.F.R. §§ 70.6(a)(3). If necessary, the TCEQ must revise the title V permit accordingly.

Response to Claim 3.B.:

The PM_{10} emissions from the pyrolysis furnaces are the result of the combustion of natural gas in the furnaces. The emissions are directly related to the combustion efficiency of the furnaces and good combustion practices are required in order to minimize PM_{10} and other pollutant emissions from the pyrolysis furnaces. The emission rate calculations include an assumption that good combustion practices will be followed since this increases combustion efficiency which has the dual benefit of minimizing emissions and fuel costs. The pollutant most indicative of good combustion efficiency from the furnace is CO and the furnaces are equipped with a continuous emissions monitor for CO with recordkeeping and reporting requirements. The CEMS is required by Special Condition 17. In addition, a stack sampling test is required by Special Condition 16 which sets the operating parameters for good combustion practice for the furnaces. The CO emissions are indicative of good combustion from the furnaces and are a reasonable surrogate for additional PM_{10} monitoring from the furnaces. Therefore, the permit contains sufficient monitoring, recordkeeping and reporting to assure compliance with the emission limits for the pyrolysis furnaces.

Claim 3.C. The Proposed Permits Do Not Assure Compliance with NSR Emission Limits for Storage Tanks and Wastewater Treatment Facilities.

It was not clear from Special Condition 18 how the rolling 12-month VOC emissions from the storage tanks are determined despite the numerous monitored parameters. It is not clear how maintenance of records of the name of material stored or loaded, annual average temperature, and VOC vapor pressure are used to determine throughput and actual VOC emissions. The permit and permit record do not explain how throughput relates to the VOC emissions limits in the title V permit. The TCEQ did not explain how the specific records required by Special Condition 18.0 relate to the TCEQ's assertion that VOC emissions will be calculated using an "approved protocol and requires the use of data specific to the storage tank and the material stored in the tank. In responding to this objection, the EPA directs the TCEO to include in the title V permit monitoring sufficient to assure compliance with VOC emissions limits for the storage tanks and explain on the record the rationale for the selected monitoring. The record should explain how the Chemical Plant Proposed Permit's monitoring is used to ascertain compliance with the emissions limits. If necessary, the TCEQ must revise the title V permit accordingly. It is possible that the Chemical Plant permit and permit record already include sufficient monitoring, record keeping, and reporting: however, due to the use of references to other permits and parts of the permit record, the title V permit itself does not clearly explain how the VOC emissions are calculated or how such calculations are used to assure compliance with the emissions limits. TCEQ may find that the existing monitoring is in fact inadequate and decide to include additional monitoring in the title V permit. In determining the appropriate monitoring, the TCEO may consider whether there are elements of the Special Conditions identified in the monitoring, testing, recordkeeping, and reporting requirement columns in the

Major NSR Summary Table that may be capable of providing an adequate means to assure compliance with the VOC emissions limits for the storage tanks. The TCEQ may also consider how the monitoring in these Special Conditions is related to the monitoring in Special Condition 18 of the PSD Permit. If the TCEQ determines that elements of the monitoring already set forth in Chemical Plant title V permit are capable of providing an adequate means to assure compliance with the title V VOC limits for storage tanks, originally in the underlying PSD permit, then the TCEQ should identify this monitoring and explain the rationale for the selected monitoring.

In responding to this objection, the EPA directs the TCEQ to include in the title V permit monitoring sufficient to assure compliance with VOC and benzene emissions limits for the storage tanks and explain on the record the rationale for the selected monitoring. The record should explain how monitoring requirements are used to ascertain compliance with the emissions limits. If necessary, the TCEQ must revise the title V permit accordingly to add additional monitoring to assure compliance with the VOC and benzene emission limits for the Refinery storage tanks. If the TCEQ determines that elements of the monitoring already set forth in Refinery title V permit are capable of providing an adequate means to assure Compliance with the title V VOC and benzene limits for storage tanks, originally in the underlying PSD permit, then the TCEQ should clearly identify this monitoring in the title V permit and explain the rationale for the selected monitoring.

In responding to *this* objection, the EPA directs the TCEQ to identify title V permit monitoring sufficient to assure compliance with VOC and benzene emissions limits at the wastewater treatment plants and explain on the record the rationale for the selected monitoring. If necessary, the TCEQ must revise the title V permit accordingly. If the TCEQ determines that elements of the monitoring already set forth in Refinery title V permit are capable of providing an adequate means to assure compliance with the title V VOC and benzene limits for wastewater treatment plants, originally in the underlying PSD permit, then the TCEQ should identify this monitoring and explain the rationale for the selected monitoring.

Response to Claim 3.C:

Special Condition 18 (Permit 3219/PSDTX974) and Special Conditions 17.G and 30 (Permit 21262) establish the parameters which must be monitored and recorded for each storage tank in order to demonstrate compliance with the permit emission limits. The emissions for each tank are calculated using the approved TCEQ and EPA calculation methodology which requires the input of the actual physical characteristics of each storage tank, as well as, the actual data of the material stored in each tank. Since the physical characteristics of the individual storage tanks do not change, the emissions from each tank are heavily dependent on the vapor pressure of the material stored and the number of times the volume of the tank turns over. Since Maximum Allowable Emission Rate Table states that compliance with the annual emission rates is on a 12month rolling basis, records must be kept on a monthly basis as a minimum in order to comply with the permit requirements. The special conditions require records of the material stored in each tank, the monthly average temperature and the vapor pressure of the material at that temperature. The conditions also require records of the throughput of each tank for each material stored. The throughput divided by the volume of the tank determines the number of tank turnovers for the month. Since the physical characteristics of the tanks do not change and the material stored in the majority of the storage tanks does not change from month to month, the most parameters which determine the tank emissions on an ongoing basis are the vapor pressure of the material stored at the monthly average temperature and the throughput of material to the tank. The conditions referenced above require records of actual physical data for each storage tank be kept and used in the emission calculations in the place of generic default information. Therefore, the monitoring and recordkeeping required by Permits

3219/PSDTX974 and 21262 are adequate to demonstrate compliance with the permit emission rates.

The permits also include procedures for establishing the speciation of the material stored in an individual storage tank. All of the approved methods of speciation require some level of actual data in order to determine the speciation of the material stored including the amount of benzene present in the material for those storage tanks listed under the benzene emission cap in Permit 21262. The method of speciation used and the data used for each material speciation must be documented in order to comply with the requirements of the special condition.

With regards to the wastewater treatment system, the approved calculation methodology is a Shell specific version of the EPA WATER8 model (CHEMSET) which requires inputs of the wastewater flow rate, the concentration of various compounds in the wastewater, oil flow rates and the determination of the phase (oil or water) of the compounds. The EPA WATER8 model is an accepted wastewater emission calculation method by the EPA and the TCEQ. The use of the Shell version of the model was approved for the calculation of wastewater emissions as part of the technical review of the 1998 permit amendment during the review of the emission calculations. The requirements of the model determine the frequency of monitoring required for the various input parameters and the rolling 12-month basis of the emission rates determines that the model must be run at least monthly in order to demonstrate compliance with the Maximum Allowable Emission Rate Table. Additionally, the wastewater treatment system is subject to the monitoring requirements of state and federal regulations which provide additional input for the CHEMSET wastewater model. Special Condition 3 lists the applicable NESHAP (40 CFR 61) for the facility including the Benzene Waste Operations, Subpart FF. Special Condition 4 lists the applicable MACT (40 CFR63) for the facility which includes Subpart G, SOCMI for Process Vents, Storage Vessels, Transfer Operations, and Wastewater. Additionally, Special Condition 30 requires the permit holder keep records to demonstrate compliance with the pound per hour and ton per year emission caps. The condition references the "Source Specific Compliance Guidelines" contained in the Flexible Permit Compliance Document. The document dated December, 1998 contains the calculation methodology for the wastewater treatment system. As stated previously, the input parameters for the wastewater model determine which parameters must be modeled and at what frequency. Permit 21262 contains adequate monitoring and recordkeeping to demonstrate compliance with the emission caps for the wastewater treatment system.

Claim 6. The Chemical Plant Proposed Permit Fails to Address Shell's Non-Compliance with 30 TAC § 116.116(d), which Requires PBRs for Previously Permitted Facilities to be Incorporated into Existing Permits on Renewal or Amendment.

In responding to this Order, the TCEQ is directed to explain the status of these PBRs and how TCEQ's actions regarding incorporation of these PBRs is consistent with 30 TAC § 116.116(d)(2). For TOL912 PBR 106.472 (9/4/2000), the TCEQ should explain the significance of that PBR not authorizing emission increases. For the remaining PBRs, the TCEQ's response should explain whether the changes authorized by the PBR were to a permitted facility and, if so, whether the permit for that permitted facility has been amended or renewed since the PBR was authorized; the TCEQ should also verify that the PBR was incorporated into the permit at that time or revise the permits accordingly.

Response to Claim 6:

Permit by Rule registration number 54061 authorized the storage of waste water in an existing storage tank and piping components to allow the transfer of waste water to the storage tank

during maintenance, start-up and shutdown. The emissions are small, infrequent and at the time the PBR was authorized MSS emissions were not authorized by permit; therefore, the PBR was not incorporated into Permit 3179 during amendment or renewal. An application for the renewal of Permit 3179 is currently pending and PBR 54061 will be incorporated into the permit upon issuance of the renewal.

The PBR authorization for TOL912 is an unregistered PBR to allow storage of waste water in an existing storage tank. The storage of waste water results in much lower emissions than those already authorized by Permit 3214. Since the primary reason for incorporating PBRs into the appropriate permit is to ensure all sources and emissions are accounted for during any air dispersion modeling and health effects review, a PBR which does not result in an increase in emissions from an existing source does not adversely affect the NSR permit review if it is not incorporated into the permit. However, Permit 3214 will expire on November 13, 2016 and an application for renewal of the permit must be received prior to this date. The PBR will be incorporated into the permit with the issuance of the renewal.

Active PBR Inventory

NSR Permit	TV Permit	Registration Number	Status	Exemptions Used	Equipment EPN
3173	O1668	75045	Active	106.261 106.262	BEETLE
3173	01668	76265	Active	106.261 106.262	V118, V392
9334	O1668	76382	Inactive	106.261 106.262 SB1126	D370, D371, D380, D381, G343, G344
3216	O1668	76699	Active	106.261 106.262	TOL905, HT2FUG
3179	01668	77284	Active	106.261 106.262	D345, D394, E8256, F8300, PAUFE, H9200
9334	01668	78839	Inactive	106.262	F357, F358, X303, X304
3218	01668	78624	Active	106.261	TUT604, TUT605
18576, 3219	O1668	79604	Active	106.261 106.262 106.492	NTFFUG, SITE3FUG VBD934, A1301, OP2ELFLA,OP3ELFLA, OP3GRFLA
3218	O1668	38972	Active	106.532	AU602
3179	O1668	80503	Active	106.262 106.478	D342, D345, D393, F354
9334	O1668	78816	Inactive	106.261 106.262	D351, D352, D353, G353, D370, D371, D380, D381
3985A	01668	84642	Active	106.262	SCRWRTC, T105
3179	01668	85596	Active	106.262 106.263	D392
3219/3214	O1668	87173	Active	106.261 106.262	K307, T331, TOL903,TOL904, TOL909, TOL910, TOL920, TOL401
21262	O1669	87183	Active	106.261 106.478	A333, A333FUG
9334/3178	O1668	87174	Inactive	106.261 106.262	D350, D369, F356, G343,G344,L333, X303, X304
3179	O1668	87871	Active	106.261	T665, D390, D391, D392, T87301, T87302
56496	01668	87871	Active	106.261	TU30900, TU30901
3179	01668	87871	Active	106.261	F8300
3219	O1668	87871	Inactive	106.261	FOL100, FOL110, FOL120, FOL130, FOL140, FOL150,

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					FOL160, FOL170,
					FOL180, FOL190
				106.478	
3179	O1668	92386	Active	106.262	T74B, SCRWRTC
21262 3214 / 3219	O1668/9	92219	Active	106.261	OL3FUG
3217	01668	92675	Active	106.478 106.262	TB3301R1
3217	O1668	92675	Active	106.478 106.262	TB3301, T309R1, TB3301R1
3217	O1668	92675	Active	106.478 106.262	TB3301R1
21262	O1669	93992	Active	106.261 106.478	A312R1, AP7R1
21262	O1669	94547	Submitted & Active	106.478	G326R1
21262	O1669	95595	Active	106.261	EPFGR
21262 3214 / 3219	O1668/9	95595	Active	106.261	FUGCOKER
21262	01669	96066	Active	106.262	V5369, FUGCR3
9334	O1668	96915	Active	106.262 106.478	G353
9334	O1668	98473	Active	106.262 106.492	EPFlare, FUGOXU
21262	O1669	98644	Active	106.478	G364
3179	O1668	100328	Active	106.261 106.262	V270, H9200
21262	O1669	100945	Active	106.262	Vent V54
3214	01668	101891	Active	106.261	OL3FUG
21262	01669	101891	Active	106.261	FUGDISP
3179	O1668	101891	Active	106.261	H87002
3214	01668	101891	Active	106.261	TF34001
9334	O1668	102096	Active	106.262 106.478	D350
21262	O1669	105772	Active	106.262	F329, F365
21262	O1669	106379	Pending	106.478 106.273	G365
1119/1120	O1668/9	109247	Active	106.261 106.478	A327 A328
9334	01668	109247	Active	106.261	S390, S391, S392, S400
3219	01668	102948	Active	106.261	TOL400 TOL909
21262	O1669	112313	Active	106.478 106.263	G366, G367
21262	O1669	112737	Active	106.478	AP20
3173	O1668	112344	Active	106.261 106.262	V392, Fugems
3179 / 3985A	O1668	108593	Active	106.261 106.262	T270, T74B
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18576 3216 01668 113881 Active 101.262	TBD301, TBD910, TBD911, TBD912, G354,
3217 3179 101.492	TOL905, FOL601, FOL602, FOL603, FOL604, IRUFUG, SITE3FUG, A1333
3214 / 3215 / O1668 115088 Active 106.261 106.478	AP19
21262 O1669 117430 Active 106.261 106.262	EBT, WBT
21262 O1669 114863 Active 106.478 106.263	AP21
21262 O1669 115095 Active 106.478	A305R1
21262 O1669 120437 Active 106.261	FUGDU1
21262 O1669 120555 Active 106.261 106.262	FUGDU1
3179 O1668 123359 Active 106.261 106.262	H9200
21262 O1669 124415 Active 106.478 106.263	A320R1
21262 O1669 125842 Active 106.262	SHU-FUG
3219 O1668 127854 Active 106.261	OP2FUG
3219 O1668 129997 Active 106.261	TOL400
3219 / 2597 O1668 130755 Active 106.262 106.478	TOL901, TOL911
3214 / 3215 O1668 115088 Active 106.261 106.478	AP19, HT3FUG, OL3FUG
1119/1120 21262 O1668/9 132997 Active 106.261 106.478	A327 A328 G362 FUGDISP
3214 O1668 133287 Active 106.261	OL3FUG
21262 O1669 134988 Active 106.478 106.263	A307R1
21262 O1669 135037 Active 106.478	A308R1