M E M O R A N D U M

DATE: May 17, 2011

TO: Richard D. Garrity, Ph.D.

FROM: Stephen Hathaway **THRU:** Diana M. Lee, P.E.

SUBJECT: DRAFT Air Construction Permit – Johnson Controls Battery Group, Inc.
Permit No.: 0570001-029-AC

Attached is DRAFT Permit No. 0570001-029-AC to modify the Three-Process Operation and Chemset operations at Johnson Controls Battery Group, Inc., located at 10215 30th Street, Tampa. This permit is being issued as a modification to Permit No. 0570001-028-AC, which authorized multiple changes to the Three-Process Operation which are enumerated below. The Three-Process Operation consists of cured plate stacking, strap casting in the Cast-On-Strap (COS) machines, and the assembly of elements into battery cases. This permit also authorizes the construction of a sixth chemset chamber and a tenth natural gas fired heater for Chemset Chamber No. 6. The Chemset modification was previously permitted under Permit No. 0570001-023-AC, but the project was not completed prior to the expiration of the permit. Johnson Controls manufactures automotive and marine batteries and is a synthetic minor source for both Particulate Matter and Lead. The modifications authorized by Permit No. 0570001-028-AC were as follows:

1. Install a new Mark 7B COS machine on COS Line No. 3.
2. Vent the emissions from COS Line No. 4 to the baghouse currently controlling COS Line No. 3.
3. Remove the baghouse currently controlling COS Line No. 4 from the facility.
4. Remove COS Line No. 5 from the facility.
5. Decouple the stacker from COS Line No. 3 and add one new independent stacker. The emissions from both stackers will be controlled by the baghouse currently controlling COS Line No. 5.
6. Adjust exhaust air flows listed in current permit for COS Line No. 3 baghouse and COS Line No. 5 baghouse based on stack test data.
7. Increase the battery production rate for COS Line No. 3 to 260 batteries/hr.
8. Perform minor physical changes to the exhaust stacks for COS Line Nos. 2 and 3 to accommodate new testing platforms that involve either increasing the stack height by no more than 13 feet or reducing the stack diameter.

In addition to these modifications, Johnson Controls will be installing a Mark 7B COS machine on COS Line No. 4, for a new capacity of 260 Batteries/hr. Also, the stacker currently connected to COS Line No. 4 will be decoupled and will operate independently from COS Line No. 4. The emissions from the decoupled stacker will still be controlled by the current baghouse. The sixth Chemset Chamber and

associated heater will be added to the facility to increase the plate curing capacity. Emissions from Chemset Chamber No. 6 will be uncontrolled and will vent through a stack. However, as a result of the above proposed modifications at the facility, the overall potential Pb and PM emissions will be reduced by 0.1 tons/yr and 2.6 tons/yr, respectively.

At the facility, lead ingots are melted and cast by a strip caster to make grids. Pasting machines force a paste of lead oxide powder, water, and sulfuric acid into the interstices of the expanded grids after which these are referred to as plates. Lead oxide powder may be made at the plant by charging lead ingots into two ball mills, which pulverizes the lead ingots and combines the lead with air to form lead oxide. Fresh made lead oxide is brought by trucks and stored on site in two storage silos.

The pasted plates are flash dried, cut, stacked, and then placed on plate trucks. The plate trucks are placed in one of six Chemset chambers where the plates are cured in a controlled environment at a constant temperature and humidity. Cured plates are stacked into groups with stackers, where the positive and negative plates are arranged in the appropriate manner and the electrical insulators are inserted between the plates. The groups are loaded in one of the COS machines where molten lead is poured around the plate lugs to form a strap. The group of plates joined by a strap is called an element. The elements are assembled into battery cases. The straps are welded to each other to connect the elements. A cover is heat-sealed to the battery case. The batteries are then immersed in a dilute sulfuric acid solution. The batteries are connected to the corresponding pole of a direct current source. Central vacuum systems are used to cleanup workstations and attend to any lead oxide spills in the plant.

The lead and particulate emissions from the facility are regulated under Rules 62-296.602 and 62-296.712, F.A.C., Reasonably Available Control Technology (RACT) for Lead and Particulate Matter, respectively, 40 CFR 60 - Subpart KK, and 40 CFR 63 – Subpart PPPPPP.

Based on our review, we recommend the issuance of the DRAFT AC permit.

SRH: 0570001-029-AC

TECHNICAL EVALUATION

AND

PRELIMINARY DETERMINATION

FOR

Johnson Controls Battery Group, Inc.

Hillsborough County

Air Construction Permit

Application Number

0570001-029-AC

Environmental Protection Commission of

Hillsborough County

Tampa, FL

May 17, 2011

I. Project Description

A. Applicant: Mike Judd
Plant Manager
Johnson Controls Battery Group, Inc.
10215 North 30th Street
Tampa, FL 33612

B. Engineer: Clifford Koenig, P.E.
HDR Engineering, Inc.
200 West Forsyth Street
Suite 800
Jacksonville, FL 32202

P.E. No.: 64078

C. Project and Location:

The applicant requested to modify the Three-Process Operation and Chemset operations at Johnson Controls Battery Group, Inc., located at 10215 30th Street, Tampa. Johnson Controls will be installing a Mark 7B COS machine on COS Line No. 4, for a new capacity of 260 Batteries/hr. Also, the stacker currently connected to COS Line No. 4 will be decoupled and will operate independently from COS Line No. 4. The emissions from the decoupled stacker will still be controlled by the current baghouse. This permit also authorizes the construction of a sixth chemset chamber and a tenth natural gas fired heater for Chemset Chamber No. 6. Johnson Controls manufactures automotive and marine batteries and is a synthetic minor source for both Particulate Matter and Lead.

The project has been assigned the NEDS Source Classification Code Nos. 3-04-005-09, 3-04-005-99, and 3-99-900-03. The Standard Industrial Code for the project is No. 3691, Miscellaneous Electrical Machinery, Equipment, and Storage Batteries. The project is located at 10215 North 30th Street, Tampa, FL 33612. UTM Coordinates of the location are 17-359.90 E and 3102.60 N.

D. Process and Controls:

At the facility, lead ingots are melted and cast by a strip caster to make grids. Pasting machines force a paste of lead oxide powder, water, and sulfuric acid into the interstices of the expanded grids after which these are referred to as plates. Lead oxide powder may be made at the plant by charging lead ingots into two ball mills, which pulverizes the lead ingots and combines the lead with air to form lead oxide. Fresh made lead oxide is brought by trucks and stored on site in two storage silos.

The pasted plates are flash dried, cut, stacked, and then placed on plate trucks. The plate trucks are placed in one of six Chemset Chambers where the plates are cured in a controlled environment at a constant temperature and humidity. Cured plates are stacked into groups with stackers, where the positive and negative plates are arranged in the appropriate manner and the

electrical insulators are inserted between the plates. The groups are loaded in one of the COS machines where molten lead is poured around the plate lugs to form a strap. The group of plates joined by a strap is called an element. The elements are assembled into battery cases. The straps are welded to each other to connect the elements. A cover is heat-sealed to the battery case. The batteries are then immersed in a dilute sulfuric acid solution. The batteries are connected to the corresponding pole of a direct current source. Central vacuum systems are used to cleanup workstations and attend to any lead oxide spills in the plant.

Permit No. 0570001-028-AC authorized the following proposed modifications to the Three-Process Operation:

1. Install a new Mark 7B COS machine on COS Line No. 3.
2. Vent the emissions from COS Line No. 4 to the baghouse currently controlling COS Line No. 3.
3. Remove the baghouse currently controlling COS Line No. 4 from the facility.
4. Remove COS Line No. 5 from the facility.
5. Decouple the stacker from COS Line No. 3 and add one new independent stacker. The emissions from both stackers will be controlled by the baghouse currently controlling COS Line No. 5.
6. Adjust exhaust air flows listed in current permit for COS Line No. 3 baghouse and COS Line No. 5 baghouse based on stack test data.
7. Increase the battery production rate for COS Line No. 3 to 260 batteries/hr.
8. Perform minor physical changes to the exhaust stacks for COS Line Nos. 1, 2, and 3 to accommodate new testing platforms that involve either increasing the stack height by no more than 10 feet or reducing the stack diameter.

Also, the air flows for EU 046, 050, and 051 were increased based on the highest flow rate from the previous 3 years of stack testing. The increase in the airflows resulted in an increase of potential emissions of 0.05 tons/yr and 2.4 tons/yr for Pb and PM, respectively. In addition to these modifications, under Permit No. 0570001-029-AC, Johnson Controls will be installing a Mark 7B COS machine on COS Line No. 4, for a new capacity of 260 Batteries/hr. Also, the stacker currently connected to COS Line No. 4 will be decoupled and will operate independently from COS Line No. 4. The emissions from the decoupled stacker will still be controlled by the current baghouse. Furthermore, a sixth Chemset Chamber and associated heater will be added to the facility to increase the plate curing capacity. Emissions from Chemset Chamber No. 6 will be uncontrolled and will vent through a stack. The Chemset modification was previously permitted under 0570001-023-AC, but the project was not completed prior to expiration of the permit. As a result of the above proposed modifications at the facility, the overall potential Pb and PM emissions will be reduced by 0.1 tons/yr and 2.6 tons/yr, respectively, under the modified AC permit, due to the removal of COS Line 5 and the consolidation of emissions streams from the Three-Process Operation.

The lead and particulate emissions from the facility are regulated under Rules 62-296.602 and 62-296.712, F.A.C., Reasonably Available Control Technology (RACT) for Lead and Particulate Matter, respectively, 40 CFR 60 - Subpart KK, and 40 CFR 63 – Subpart PPPPPP.

E. Application Information:

Received on: April 18, 2011

Information Requested: n/a
Application Complete: April 18, 2011

II. Rule Applicability

This project is subject to the pre-construction review requirements of Chapter 403, Florida Statutes, Chapters, 62-204, 62-210, 62-212, 62-296, and 62-297, Florida Administrative Code (F.A.C.) and Chapter 1-3 of the Rules of the Environmental Protection Commission of Hillsborough County.

This project is not subject to the requirements of Rule 62-212.400, Prevention of Significant Deterioration, F.A.C. or Rule 62-212.500, New Source Review for Non-attainment Areas, F.A.C., since the facility is minor by state definition with respect to Rules 62-212.400 and 500, F.A.C.

This project is subject to the requirements of Rule 62-212.300, Sources Not Subject to Prevention of Significant Deterioration or Non-attainment Requirements, F.A.C., since a permit is required for this project.

This project is subject to the requirements of Rule 62-296.320, General Pollutant Emission Limiting Standards, F.A.C., since the facility is a source of particulate matter and opacity, and a potential source of odor.

This project is not subject to the requirements of Rule 62-296.401 through 62-296.417, Specific Emission Limiting and Performance Standards, F.A.C., since there is not an applicable source category.

This project is not subject to the requirements of Rule 62-296.500, Reasonably Available Control Technology for VOCs, F.A.C., since there is not an applicable category for this source.

This project is subject to the requirements of Rule 62-296.600, F.A.C., Reasonably Available Control Technology for Lead, and Rule 62-296.602, F.A.C., Primary Lead-Acid Battery Manufacturing Operations, since the facility is a source of lead emissions.

This project is subject to the requirements of Rule 62-296.700, Reasonably Available Control Technology for Particulate Matter, F.A.C., specifically Rule 62-296.712, F.A.C., since it is located within the Hillsborough County Maintenance Area for the pollutant particulate matter and the facility emissions are greater than 15 tons per year and 5 lbs/hr.

This project is subject to the requirements of Rule 62-204.800, Federal Regulations Adopted by Reference, F.A.C., since the facility is subject to 40 CFR 60, Subpart KK and 40 CFR 63, Subpart PPPPPP (National Emission Standards for Hazardous Air Pollutants for Lead Acid Battery Manufacturing Plants).

This project is subject to the requirements of Chapter 84-446, Laws of Florida and Chapter 1-3, Rules of the Environmental Protection Commission of Hillsborough County.

III. Summary of Emissions

Emission Unit(s)	Regulated Pollutants	Current Actual Emissions (TPY)*	Future Potential Emissions (TPY)	Allowable Emissions**
050 - COS Line No. 3 **052** - COS Line No. 4 w/ decoupled Stacker	Pb	0.0007	0.39	0.000437 gr/dscf
	PM	0.03	17.98	0.02 gr/dscf
	Opacity	n/a	n/a	0%
051 - Stackers	Pb	0.0003	0.24	0.000437 gr/dscf
	PM	0.02	8.12	0.015 gr/dscf
	Opacity	n/a	n/a	0%
047 - Chemset/Plate Curing Chamber No. 6 **048** - Heater No. 10	Pb	0	0.09	0.000437 gr/dscf
	PM	0	3.04	0.015 gr/dscf
	Opacity	n/a	n/a	0%
TOTAL	Pb	0.001	0.69	
	PM	0.05	29.1	

*Based on average of 2008 and 2009 AOR's for COS Line 3 and COS Line 5.
**The allowable emissions for lead is based on 40 CFR 60 - Subpart KK and Rule 62-296.602(1)(c), F.A.C.
NOTE: Additional products of combustion for EU 048 Heater No. 10 for Chemset Chamber No. 6 are CO 0.46 tpy, NO_x 0.54 tpy, SO_2 0.003 tpy, and VOC 0.03 tpy.

The changes in the potential emissions for the baghouse controlling EU 050 and 052 result from substituting an airflow of 23,946 dscfm into the calculations rather than 21,287 dscfm as previously used. The new airflow rate was based on the highest flow rate from the previous 3 years of stack testing, which came from the November 2008 test. The past 3 years were used because the COS Lines were modified in early 2007. The increase in airflow results in increases of potential emissions of 0.04 ton/yr and 2.0 ton/yr for Pb and PM, respectively for the baghouse.

The changes in the potential emissions for the baghouse controlling EU 051 result from substituting an airflow of 14,420 dscfm into the calculations rather than 13,725 dscfm as previously used. The new airflow rate was based on the highest flow rate from the previous 3 years of stack testing, which came from the November 2009 test. The past 3 years were used because the COS Lines were modified in early 2007. The increase in airflow results in increases of potential emissions of 0.01 ton/yr and 0.39 ton/yr for Pb and PM, respectively for the baghouse.

Chemset Chamber No. 6 is capable of processing 66 tons of plates per batch and 11,936 tpy of plates. A natural gas fired heater (No. 10) rated at 1.3 MMBtu/hr supplies heat for Chemset No. 6. The plates are cured at a constant temperature and humidity for about 36 hours prior to being assembled into battery elements. The emissions from the plate curing operations are uncontrolled and vent through a stack. The estimated gas flow rate from the stack is 5,320 dscfm.

Inventory of Title III pollutants is estimated to be less than 10 TPY individually and less than 25 TPY collectively.

IV. Conclusions:

The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C., and Chapter 1-3, Rules of the Commission.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

V. Proposed Agency Action:

Pursuant to Section 403.087, Florida Statutes and Rule 62-4.070, Florida Administrative Code the Environmental Protection Commission of Hillsborough County hereby gives notice of its intent to issue a permit to construct the aforementioned air pollution source in accordance with the draft permit and its conditions as stipulated (see attached).

CERTIFIED MAIL

In the Matter of an
Application for Permit by:

File No.: 0570001-029-AC
County: Hillsborough

Mike Judd
Plant Manager
Johnson Controls Battery Group, Inc.
10215 North 30th Street
Tampa, FL 33612
_____/

INTENT TO ISSUE

The Environmental Protection Commission of Hillsborough County (EPC), as delegated by the Florida Department of Environmental Protection (DEP) gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the application specified above, for the reasons stated below.

The applicant, Johnson Controls Battery Group, Inc., applied on April 18, 2011 to the EPC for a permit to modify the Three-Process Operation and Chemset operations at the facility. The project consists of replacing the Cast-On-Strap (COS) machine on COS Line No. 4, decoupling the stacker on COS Line No. 4, constructing a sixth Chemset plate curing chamber, and a tenth natural gas fired heater for Chemset Chamber No. 6. This permit is being issued as a modification to Permit No. 0570001-028-AC.

The EPC has permitting jurisdiction under Chapter 403 Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4 and 62-210. The project is not exempt from permitting procedures. The EPC has determined that an air pollution construction permit is required to commence or continue operations at the described facility.

The EPC intends to issue this permit based on the belief that reasonable assurances have been provided to indicate that operation of the source will comply with the appropriate provisions of Florida Administrative Code (F.A.C.) Chapters 62-204 through 62-297 and 62-4.

Pursuant to Section 403.815 and 403.0872, F.S. and Rules 62-103.150 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue

Permit. The notice shall be published one time as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the EPC at the address or telephone number listed below. **The applicant shall provide proof of publication to the EPC, Air Permitting Section, at 3629 Queen Palm Dr., Tampa, Florida 33619 (Phone 813-627-2600 - FAX 813-627-2660) within 7 (seven) days of publication.** Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit pursuant to Rule 62-103.150(6), F.A.C.

The EPC will issue the final permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Section 120.569 and 120.57 F.S. before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Legal Department of the EPC at 3629 Queen Palm Dr., Tampa, Florida 33619, Phone 813-627-2600, Fax 813-627-2602. Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 (fourteen) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), however, any person who asked the EPC for notice of agency action may file a petition within 14 (fourteen) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S.; or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the EPC's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number if known;
(b) The name, address, and telephone number of the petitioner and the name, address, and telephone number of each petitioner's representative, if any, which shall be the address for service purposes during the course of the proceedings; and an explanation of how the petitioner's substantial interests will be affected by the EPC's determination;
(c) A statement of how and when the petitioner received notice of the EPC action;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the EPC's proposed action;
(f) A statement of specific rules or statutes that the petitioner contends requires reversal or modification of the EPC's proposed action, including an explanation of how the alleged facts relate to the specific

rules or statutes; and

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the EPC to take with respect to the EPC's proposed action.

A petition that does not dispute the material facts upon which the EPC's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the EPC's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the EPC on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under section 120.573, F.S. is not available in this proceeding.

This action is final and effective on the date filed with the Clerk of the EPC unless a petition is filed in accordance with above. Upon the timely filing of a petition, this order will not be effective until further order of the EPC.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, FL 32399-3000. The petition must specify the following information:

(a) The name, address, and telephone number of the petitioner,
(b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any,
(c) Each rule or portion of a rule from which a variance or waiver is requested,
(d) The citation to the statute underlying (implemented by) the rule identified in (c) above,
(e) The type of action requested,
(f) The specific facts that would justify a variance or waiver for the petitioner,
(g) The reason by the variance or waiver would serve the purposes of the underlying statute (implemented by the rule), and
(h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of the those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of United States Environmental Protection Agency and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Any person listed below may request to obtain additional information, a copy of the application (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), all relevant supporting materials, and all other materials available to the EPC that are relevant to the permit decision. Interested persons may contact Diana M. Lee, P.E., at the above address or call (813) 627-2600, for additional information.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statues, by filing a notice of appeal under rule 9.110 of the Florida rules of Appellate Procedure with the EPC's Legal Office at 3629 Queen Palm Dr., Tampa, Florida 33619 and with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tampa, Florida

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

_____

Richard D. Garrity, Ph.D.
Executive Director

cc: Florida Department of Environmental Protection, Southwest District (via e-mail)
Clifford Koenig, P.E., HDR Engineering, Inc.

CERTIFICATE OF SERVICE

The undersigned duly designated clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed before the close of business on _____ to the listed persons.

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated clerk, receipt of which is hereby acknowledged.

_____ _____

Clerk Date

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY
NOTICE OF INTENT TO ISSUE PERMIT

The Environmental Protection Commission of Hillsborough County (EPC), as delegated by the Florida Department of Environmental Protection (DEP) gives notice of its intent to issue air pollution Permit No. 0570001-029-AC to Johnson Controls Battery Group, Inc., for a construction permit to modify the Three-Process Operation and Chemset operations at the facility. The project consists of replacing the Cast-On-Strap (COS) machine on COS Line No. 4, decoupling the stacker on COS Line No. 4, constructing a sixth Chemset plate curing chamber, and a tenth natural gas fired heater for Chemset Chamber No. 6. Emissions are controlled by the use of baghouses. The facility, which is a Synthetic Non-Title V source is located at 10215 North 30th Street, Tampa, FL 33612.

A Best Available Control Technology (BACT) determination was not required.

The EPC will issue the Final permit with the conditions of the DRAFT permit unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S. before the deadline for filing a petition. The procedures for petitioning for hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Legal Department of the EPC at 3629 Queen Palm Dr., Tampa, Florida 33619, Phone 813-627-2600, Fax 813-627-2602. Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 (fourteen) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), however, any person who asked the EPC for notice of agency action may file a petition within 14 (fourteen) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the F.A.C.

A petition that disputes the material facts on which the EPC's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number if known;
(b) The name, address, and telephone number of the petitioner, and the name, address, and telephone number of each petitioner's representative, if any, which shall be the address for service purposes during the course of the proceedings; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
(c) A statement of how and when petitioner received notice of the EPC action;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends

warrant reversal or modification of the EPC proposed action;

(f) A statement of specific rules or statutes that the petitioner contends requires reversal or modification of the EPC's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the EPC to take with respect to the EPC's proposed action.

A petition that does not dispute the material facts upon which the EPC's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the EPC's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the EPC on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under section 120.573, F.S. is not available in this proceeding.

This action is final and effective on the date filed with the Clerk of the EPC unless a petition is filed in accordance with above. Upon the timely filing of a petition this order will not be effective until further order of the EPC.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statues, by filing a notice of appeal under rule 9.110 of the Florida rules of Appellate Procedure with the EPC's Legal Office at 3629 Queen Palm Dr., Tampa, Florida 33619 and with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

The complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Environmental Protection Commission of Hillsborough County, 3629 Queen Palm Dr., Tampa, FL 33619. The complete project file includes the proposed Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Diana M. Lee, P.E.**,** at the above address, or call 813-627-2600, for additional information. Any written comments filed shall be available for public inspection. If written comments received result in a significant change in the proposed agency action, the EPC shall revise the proposed permit and require, if applicable, another Public Notice.

ENVIRONMENTAL PROTECTION COMMISSION OF
HILLSBOROUGH COUNTY, as Delegated by

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF PERMIT

Mike Judd
Plant Manager
Johnson Controls Battery Group, Inc.
10215 North 30th Street
Tampa, FL 33612

Dear Mr. Judd: Re: Hillsborough County - AP

Enclosed is Permit Number 0570001-029-AC to modify the Three-Process Operation and Chemset operations at the facility. The project consists of replacing the Cast-On-Strap (COS) machine on COS Line No. 4, decoupling the stacker on COS Line No. 4, and constructing a sixth Chemset plate curing chamber and a tenth natural gas fired heater for Chemset Chamber No. 6. This permit is being issued as a modification to Permit No. 0570001-028-AC.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the EPC in the Legal Department at 3629 Queen Palm Dr., Tampa, Florida 33619; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the clerk of the EPC.

Executed in Tampa, Florida.

Sincerely,

Richard D. Garrity, Ph.D.
Executive Director

RDG/SRH/srh

cc: Florida Department of Environmental Protection (e-mail)
Clifford Koenig, P.E., HDR Engineering, Inc.

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on _____ to the listed persons.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated clerk, receipt of which is hereby acknowledged.

_____ _____
Clerk Date

PERMITTEE:	PERMIT/CERTIFICATION
Mr. Michael Judd	Permit No.: 0570001-029-AC
Plant Manager	County: Hillsborough
Johnson Controls Battery Group, Inc.	Expiration Date: August 16, 2012
10215 N. 30th St.	Project: Modify Three-Process Operation and Chemset Operations
Tampa, FL 33612	

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 62-204, 62-210, 62-212, 62-296, 62-297, and 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the EPC and made a part hereof and specifically described as follows:

For the modification of the Three-Process Operation and Chemset plate curing operations at a marine and automotive lead acid battery manufacturing plant. The Three-Process Operation consists of cured plate stacking, strap casting in the Cast-On-Strap (COS) machines, and the assembly of elements into battery cases. The Chemset operations consist of the curing of pasted plates in one of six heated chambers which are controlled at a constant temperature and humidity. The modifications to the Three-Process Operation are authorized as follows:

1. Install a Mark 7B COS machine on COS Line Nos. 3 and 4.
2. Increase the battery production rate for COS Line Nos. 3 and 4 to 260 batteries/hr.
3. Vent the emissions from COS Line No. 4 to the baghouse currently controlling COS Line No. 3.
4. Decouple the stacker from COS Line No. 4. The emissions from the decoupled stacker will be controlled by the baghouse currently controlling COS Line No. 3.
5. Remove the baghouse currently controlling COS Line No. 4 from the facility.
6. Remove COS Line No. 5 from the facility.
7. Decouple the stacker from COS Line No. 3 and add one new independent stacker. The emissions from both stackers will be controlled by the baghouse currently controlling COS Line No. 5.
8. Adjust exhaust air flows listed in current permit for COS Line No. 3 baghouse and COS Line No. 5 baghouse based on the past 3 years of stack test data.
9. Perform minor physical changes to the exhaust stacks for COS Line Nos. 2 and 3 to accommodate new testing platforms that involve either increasing the stack height by no more than 13 feet or reducing the stack diameter.

This permit also authorizes the construction of a sixth Chemset chamber and a tenth natural gas fired heater for Chemset/Curing Chamber No. 6. The sixth Chemset Chamber and associated 1.3 MMBtu/hr heater will be added to the facility to increase the plate curing capacity. Emissions from Chemset Chamber No. 6 and Heater #10 will be uncontrolled and vent through their respective stacks.

At the facility, lead ingots are melted and cast by a strip caster to make grids. Pasting machines force a paste of lead oxide powder, water, and sulfuric acid into the interstices of the expanded grids after which these are referred to as plates. Lead oxide powder may be made at the plant by charging lead ingots into two ball mills, which pulverizes the lead ingots and combines the lead with air to form lead oxide. Fresh made lead oxide is brought by trucks and stored on site in two storage silos.

The pasted plates are flash dried, cut, stacked, and then placed on plate trucks. The plate trucks are placed in one of six heated Chemset chambers where the plates are cured in a controlled environment at a constant temperature and humidity for approximately 36 hours. Cured plates are stacked into groups with stackers, where the positive and negative plates are arranged in the appropriate manner and the electrical insulators are inserted between the plates. The groups are loaded in one of the COS machines where molten lead is poured around the plate lugs to form a strap. The group of plates joined by a strap is called an element. The elements are assembled into battery cases. The straps are welded to each other to connect the elements. A cover is heat-sealed to the battery case. The batteries are then immersed in a dilute sulfuric acid solution. The batteries are connected to the corresponding pole of a direct current source. Central vacuum systems are used to cleanup workstations and attend to any lead oxide spills in the plant.

The lead and particulate emissions from the facility are regulated under Rules 62-296.602 and 62-296.712, F.A.C., Reasonably Available Control Technology (RACT) for Lead and Particulate Matter, respectively, 40 CFR 60 - Subpart KK, and 40 CFR 63 – Subpart PPPPPP.

Below is a list of the Emission Units and the respective emission control equipment that will be in place once the proposed modifications are complete.

Source Designation	**EU ID**	**Regulated Pollutants**	**Control Equipment**	**Stack No.**
Cast-On-Strap Line No. 1	002	PM, Pb, Opacity	13,747 DSCFM Ruemelin 4120	134A
COS Line No. 1 Heat Seal Vent	039		None	248
Cast-On-Strap Line No. 2	018	PM, Pb, Opacity	15,056 DSCFM American Air Filter Model No. 12-216-3464 Baghouse	198

COS Line No. 2 Heat Seal Vent	039		None	249
Cast-On-Strap Line No. 3 (Mark 7B)	050	PM, Pb, Opacity	23,946 DSCFM American Air Filter Model 312-288-4618 Baghouse	204
COS Line No. 3 Heat Seal Vent	039		None	347
Cast-On-Strap Line No. 4 (Mark 7B) w/ Decoupled Stacker	052	PM, Pb, Opacity	23,946 DSCFM American Air Filter Model 312-288-4618 Baghouse	204
COS Line No. 4 Heat Seal Vent	039		None	364
Stackers (2)	051	PM, Pb, Opacity	14,420 DSCFM Seneca Model 195-FMTHS-12Baghouse	351
Chemset/Curing Chamber No. 6	047	PM, Pb, Opacity	None	367
Heater No. 10 for Chemset/Curing Chamber No. 6	048	PM, VOC, NOx, SO_2, CO, Pb, Opacity	None	368

The lead and particulate emissions from the facility are regulated under Rules 62-296.602 and 62-296.712, F.A.C., Reasonably Available Control Technology (RACT) for Lead and Particulate Matter, respectively, 40 CFR 60 - Subpart KK, and 40 CFR 63 – Subpart PPPPPP.

Location: 10215 30th Street, Tampa, Hillsborough County, FL 33612

UTM: 17-359.90 E and 3102.60 N NEDS NO: 0570001

Emission Unit Nos.:

002	COS Line No. 1
018	COS Line No. 2
039	Four (4) Heat Seal Vents on COS Lines
047	Chemset/Curing Chamber No. 6
048	Heater No. 10 for Chemset/Curing Chamber No. 6
050	COS Line No. 3 (Mark 7B)
051	Stackers (2)
052	COS Line No. 4 (Mark 7B) w/ Decoupled Stacker

References Permit Nos.: 0570001-028-AC
0570001-027-AC/026-AF

SPECIFIC CONDITIONS:

1. A part of this permit is the attached General Conditions. [Rule 62-4.160, F.A.C.]

2. All applicable rules of the Environmental Protection Commission of Hillsborough County including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction. [Rule 62-4.070(7), F.A.C.]

3. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C., or any other requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]

4. As requested by the permittee, in order to limit the potential to emit, the total emissions from the Three-Process Operation shall not exceed 42.3 tons per year of particulate matter and 1.1 tons per year of lead. In addition, the total emissions from Chemset/Curing Chamber No. 6 and Heater No. 10 shall not exceed 3.0 tons per year of particulate matter and 0.1 tons per year of lead. [Rule 62-4.070(3), F.A.C., Permit No. 0570001-028-AC, and Permit Application Received April 18, 2011]

5. The permittee shall not cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

6. To comply with the emissions limits in Specific Condition No. 4, the following restrictions and terms shall apply: [Rule 62-4.070(3), 62-296.320(4)(c), F.A.C., Permit No. 0570001-028-AC, and Permit Application Received April 18, 2011]

A) The Three-Process Operation and Chemset/Curing Chamber No. 6 are allowed to operate continuously (8,760 hrs/yr).
B) All dust and lead laden air from the emissions units listed on Page 2 and 3 of this permit shall be captured and vented through the corresponding control devices and/or stacks as stated on the same pages.

7. The permittee shall adhere to the attached Operation and Maintenance Plan for the control of particulate matter and lead emissions. The Operation and Maintenance Plan is an enforceable component of this permit. [Rules 62-296.700(6), 62-296.600(4), and 62-4.070(3), F.A.C., Permit No. 0570001-026-AF/027-AC and 028-AC; and 40 CFR 63.11423]

Three-Process Operation Facility: Four Cast-On-Strap Lines, designated as COS Line Nos. 1, 2, 3, and 4 (EU 002, EU 018, EU 050, EU 052), two independent stackers (EU 051), and four heat seal vents (EU039). Note: The heat seal vents are not considered sources of lead emissions.

SPECIFIC CONDITIONS:

8. The permittee shall not allow lead emissions to exceed the following:

Source	Emission Limitations		
	gr/dscf	lb/hr	TPY
Three-Process Operation Facility			
Cast-On-Strap Line No. 1	0.000437	0.05	0.23
Cast-On-Strap Line No. 2		0.06	0.25
Cast-On-Strap Line No. 3		0.09	0.39
Cast-On-Strap Line No. 4			
Stackers (2)		0.05	0.24
Paste Mixing Facility			
Chemset/Curing Chamber No. 6	0.000437	0.02	0.09

A) 1.00 mg/dscm (0.000437 gr/dscf) and 0% opacity for the Three-Process Operation facility where the mass emission standard can be met by a weighted average of all the vents associated with the three process operation.
B) 0.000437 gr/dscf and 0% opacity for the Three-Process Operation sources and Chemset/Curing Chamber No. 6.
C) Combined lead emissions from COS Line Nos. 1, 2, 3, and 4 and the Stackers shall not exceed 1.1 tons/yr.
D) Lead emissions from Chemset/Curing Chamber No. 6 shall not exceed 0.09 tons/yr.

[40 CFR 60.372(a)(2), (3), and (7), 40 CFR 63.11423(a); and Rules 62-204.800, 62-296.602(1)(b) and (c), 62-4.070(3), F.A.C., Permit No. 0570001-028-AC, and Permit Application Received April 18, 2011]

9. The permittee shall not allow particulate matter emissions to exceed the following:

	Emission Limitations		
	gr/dscf	lb/hr	TPY
Three-Process Operation			
Cast-On-Strap Line No. 1	0.015	1.77	7.7
Cast-On-Strap Line No. 2	0.015	1.94	8.5
Cast-On-Strap Line No. 3	0.02	4.11	18.0
Cast-On-Strap Line No. 4			
Stackers (2)	0.015	1.85	8.1
Paste Mixing Facility			
Chemset/Curing Chamber No. 6	0.015	0.68	3.0
Heater No. 10	n/a	0.01	0.04

SPECIFIC CONDITIONS:

[Rule 62-4.070(3), F.A.C., Permit No. 0570001-028-AC, and Permit Application Received April 18, 2011]

10. Compliance with Specific Condition No. 8.A) shall be demonstrated using the following equation: [40 CFR 60.374(b)(2) Permit Nos. 0570001-026-AF/027-AC and 0570001-028-AC]

$$Lead(gr/dscf) = \frac{(C_1 \times dscfm_1) + (C_2 \times dscfm_2) + (C_{3,4} \times dscfm_{3,4}) + (C_S \times dscfm_S)}{(dscfm_1 + dscfm_2 + dscfm_{3,4} + dscfm_S)}$$

Where,

C_x = Stack exhaust concentration for COS Line Nos. 1, 2, 3, 4, and stackers (gr/dscf)

11. Process rates for each specified operation shall not exceed the following: [Rule 62-4.070(3), F.A.C. and Permit Nos. 0570001-015, 016, 019, 022, 023, 027, 028-AC and Permit Application received April 18, 2011]

Source	**E.U. ID #/ Stack#**	**Process Rate**
Three-Process Operation Facility		
Cast-On-Strap Line No. 1	002/134A	190 batteries/hr
Cast-On-Strap Line No. 2	018/198	190 batteries/hr
Cast-On-Strap Line No. 3	050/204	260 batteries/hr
Cast-On-Strap Line No. 4	052/204	260 batteries/hr
Stackers (2)	051/351	24,000 plates/hr/stacker 48,000 plates/hr total
Heat Seal Vents for COS Lines	039/248 249 347 364	N/A
Paste Mixing Facility		
Chemset/Curing Chamber No. 6	047/367	66 tons/batch, 11,936 tons/yr
Heater No. 10 for Chemset/Curing Chamber No. 6	048/368	1.3 MMBtu/hr, 11 MMSCF/yr

SPECIFIC CONDITIONS:

Testing Methods and Procedures

12. Test the following Emission Units for the following pollutant(s) as specified in Specific Condition No. 15 within 60 days of achieving the maximum production rate specified in Specific Condition No. 11, but no later than 180 days after commencing operation following modifications authorized by this permit and submit two copies of the test data to the Air Management Division of the Environmental Protection Commission of Hillsborough County within forty-five days of such testing. Testing procedures shall be consistent with the requirements of Rule 62-297.310, F.A.C. and 40 CFR 60.8(a).

Emission Unit	E.U. ID #/ Stack #	Particulate	Lead	Opacity
Cast-On-Strap Line No. 3	050 / 204	X	X	X
Cast-On-Strap Line No. 4 w/ Decoupled Stacker	052 / 204	X	X	X
Stackers (2)	051 / 351	X	X	X
Chemset/Curing Chamber No. 6	047 / 367	X	X	X
Heater No. 10 for Chemset/Curing Chamber No. 6	048 / 368	N/A	N/A	X

[Section 403.161(1)(c) Florida Statutes; Rules 62-4.070(3) and 62-297, F.A.C.; and 40CFR 60.8(a)]

13. Compliance with the emission limitations of Specific Condition Nos. 4, 8, and 9 shall be determined using EPA Methods 1, 2, 3, 4, 5, 9, and 12 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 62-297, F.A.C. The EPA Method 9 visible emission test shall be a minimum of 30 minutes in duration and conducted concurrent with one of the lead test runs. The minimum requirements for stack sampling facilities, source sampling, and reporting, shall be in accordance with Rule 62-297, F.A.C. and 40 CFR 60, Appendix A. [40 CFR 60.11 and Rule 62-4.070(3), F.A.C.]

14. The permittee shall provide at least the minimum requirements for stack sampling facilities as specified in 40 CFR 60.8(e)(1), (2), (3) and (4) and Rule 62-297.310(6), F.A.C. Source sampling platforms, platform access, and other associated work areas, whether permanent or temporary, shall be in accordance with Occupational Safety and Health Administration standards per 29 CFR 1910, Subparts D and E.

15. Testing of emissions shall be conducted at 90-100% of the maximum permitted process rates as stated in Specific Condition No. 11. During compliance testing of COS Line No. 4, the decoupled stacker shall be operating at the maximum rate practically achievable. For the compliance testing of Chemset/Curing Chamber No. 6, the chamber shall contain one day's production of wet pasted plates and be at some stage of the curing cycle. The compliance test

report should contain the amount of plates (tons and number of plates) in the chamber during testing. If it is impracticable to test at capacity, then the source may be tested at less than capacity; in this case subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the EPC. Failure to submit the input rates and actual operating conditions such as baghouse pressure drop, where applicable, may invalidate the test. [Rule 62-297.310(2)(b) and 62-4-070(3), F.A.C.]

16. The permittee shall notify the Environmental Protection Commission of Hillsborough County at least 30 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the contact person who will be responsible for coordinating and having such test conducted. [Rule 62-4.070(3), F.A.C.; 40 CFR 60.7(a)6; and 40 CFR 63.9(f)]

17. The permittee shall comply with the following requirements: [Rule 62-204.800, F.A.C.]

A) The permittee shall furnish the EPC written notification as follows: [40 CFR 60.7(a)]
   1. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The EPC may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]
   2. Written notifications are to be made to the Air Management Division of the Environmental Protection Commission of Hillsborough County

B) The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]

C) The permittee shall maintain a file of all measurements, including performance testing measurements and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records. [40 CFR 60.7(f)]

D) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A (40 CFR 60). [40 CFR 60.11(b)]

E) The opacity standards set forth in this permit shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40

CFR 60.11(c) and 40 CFR 63.6(g)]

F) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the EPC which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d) and 40 CFR 63.6(e)]

G) No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12 and 40 CFR 63.4]

18. The permittee shall maintain records of all process control operating parameters and process upsets. The records shall include the nature and duration of upsets and emission control equipment malfunction, a detailed description of the nature and duration of the upset or malfunction, the expected effects on emissions and corrective actions taken or planned to avoid recurrences. Such records shall be available at the plant site for inspections by the Region IV Administrator of EPA or its authorized agent for a period of at least two years. [40 CFR 60.7(b), Rule 62-4.070(3), F.A.C. and Permit Nos. 0570001-026-AF/027-AC and 028-AC]

19. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Rule 62-296.320, F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing, and handling. Reasonable precautions shall include, but not be limited to, the following: [Rules 62-296.320(4)(c)1., 62-4.070(3), F.A.C., and Permit Nos. 0570001-026-AF/027-AC and 028-AC]

<u>Three-Process Operation Facility</u>

A) Keep covers on process equipment.
B) Keep an air tight seal on each baghouse's dust disposal containers.
C) Maintain cleanliness of the enclosures of the baghouse fines handling area and clean on a daily basis. Cleaning may be by HEPA vacuuming, mopping or sweeping with a dust-absorbing compound. Cleaning by means of dry sweeping or through the use of blowers is not permitted.
D) Prompt cleanup of spills.

SPECIFIC CONDITIONS:

E) Routine cleaning of areas used by vehicles and machines. Cleaning may be by HEPA vacuuming, mopping, sweeping with a dust-absorbing compound, or through use of a floor scrubber. Cleaning by means of dry sweeping or through the use of blowers is not permitted.
F) Make plant personnel aware of the environmental requirements in this permit.
G) Exercise good housekeeping at all times.
H) Ensure proper disposal of any lead waste.

Other Lead Emitting Processes

Central Vacuum System

I) Complete enclosure of the baghouse, hoppers, and fines handling area, or cleaning any operation area twice daily. Cleaning may be by HEPA vacuuming, mopping or sweeping with a dust-absorbing compound. Cleaning by means of dry sweeping or through the use of blowers is not permitted.
J) Attend to any accidental spills or upsets promptly and effectively. Stop operation, if necessary.
K) Make plant personnel aware of the environmental requirements under this permit.
L) Exercise good housekeeping practices at all times.
M) Service and replacement of fabric bags and filter media.

20. No owner or operator of a lead processing operation shall cause, allow, or permit the emissions of lead, including emissions of lead from vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrial-related activities such as loading, unloading, charging, melting, tapping, casting, storing or handling, unless reasonably available control technology (RACT) is employed to control such lead emissions. RACT measures shall include, but not be limited to, the following: [Rule 62-296.601(2)(a), F.A.C. and Permit Nos. 0570001-015, 022, and 027-AC]

A) All control measures listed in Specific Condition No. 19 of this permit.
B) The permittee shall optimize the lead oxide delivery system. The optimization process shall include, but not be limited to, the following:
   1) Following the delivery truck inspection procedures for weld defects testing, checking the integrity of the flexible joints connecting hoppers, driver monitoring of the truck unloading process, and checking hose parameters.
   2) Using a dedicated location for the trucks during unloading.
   3) Utilize a dedicated plant transfer blower in lieu of the truck blower.
   4) Follow the lead oxide unloading procedures established by JCBG's letter of May 19, 1999.
C) Vacuuming the roads and other paved areas under the control of the owner or operator of

the facility to prevent lead from becoming airborne.

D) Landscaping or planting of vegetation on unpaved roads, parking areas and yards.
E) Using hoods, fans, filters, and similar equipment to capture, contain, and control lead emissions.
F) Enclosing or covering conveyor systems.

21. The permittee shall keep the following records for a minimum of two years and make them available to any representative of the Department or the Environmental Protection Commission of Hillsborough County upon request: [Rules 62-296.600(5) and 62-296.700(6), F.A.C.; and 40 CFR 60.7(f)]

A) Records of control equipment operating parameters as detailed in the Operation and Maintenance Plan (O&M) in Attachment A of this permit and monitoring device calibration checks.
B) Maintenance records on the control equipment, including black light tests, bag replacements, structural repairs, motor replacements and any adjustments that are made to monitoring devices.
C) Records of control system and malfunctions or failures and corrective actions taken.

22. In order to demonstrate compliance with Specific Condition Nos. 4, 6, and 11, the permittee shall maintain records of operations for the most recent three year period. The records shall be made available to the Environmental Protection Commission of Hillsborough County, state or federal air pollution agency upon request. The records shall include, but not limited to, the following: [Rule 62-4.070(3) and 62-4.160(14), F.A.C.]

(A) Monthly and twelve month rolling total of batteries produced on each COS line.
(B) Hours of operation for each COS line (hrs/month).
(C) Average hourly battery production on a monthly basis for each COS line (batteries/hr).
(D) Monthly and twelve month rolling total of natural gas usage for the entire facility. In order to demonstrate compliance with Specific Condition No. 11, the permittee shall apportion the amount of natural gas usage for the Chemset heaters based upon process knowledge.

23. The permittee shall comply with the following requirements: [Rule 62-204.800, F.A.C.]

A) For any emissions point controlled by a fabric filter, the permittee must meet the requirements of paragraph (1) and either paragraph (2) or (3) below. Fabric filters equipped with a high efficiency particulate air (HEPA) filter or other secondary filter are allowed to monitor less frequently (i.e. weekly), as specified in paragraph (b)(2)(iv) of 40 CFR 63.11423: [40 CFR 63.11423]
    (1) The permittee must perform and record semiannual inspections and maintenance to ensure proper performance of each fabric filter. This includes inspection of structural and filter integrity.

(2) The permittee must install, maintain, and operate a pressure drop monitoring device to measure the differential pressure drop across the fabric filter during all times when the process is operating. The pressure drop shall be recorded at least once per day. If a pressure drop is observed outside of the normal operational ranges, the permittee must record the incident and take immediate corrective actions. The permittee must also record the corrective actions taken. The permittee must submit a monitoring system performance report in accordance with §63.10(e)(3).

(3) The permittee must conduct a visible emissions observation at least once per day to verify that no visible emissions are occurring at the discharge point to the atmosphere from any emissions unit. If visible emissions are detected, the permittee must record the incident and conduct an opacity measurement in accordance with 40 CFR 60.374(b)(3). The permittee must record the results of each opacity measurement. If the measurement exceeds the applicable opacity standard in 40 CFR 60.372(a)(7) or (8), the permittee must submit this information in an excess emissions report required under 40 CFR 63.10(e)(3).

B) The non-opacity standards set forth in this permit shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 63.6(f)]

C) The permittee shall submit an excess emissions and continuous monitoring system performance report and/or a summary report semiannually. [40 CFR 63.10(e)(3) and 40 CFR 63.11423(b)(2)]

D) All excess emissions and monitoring system performance reports and all summary reports, if required, shall be delivered or postmarked by the 30th day following the end of each calendar half. Written reports of excess emissions or exceedances of process or control system parameters shall include all the information required in 40 CFR 63.10(c)(5) through (c)(13), in 40 CFR 63.8(c)(7) and (c)(8), and in the relevant standard, and they shall contain the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances of a parameter have occurred, or a CMS has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report. [40 CFR 63.10(e)(3) and 40 CFR 63.11423(b)(2)]

E) The permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63 recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. [40 CFR 63.10(b)]

SPECIFIC CONDITIONS:

24. When the Environmental Protection Commission of Hillsborough County (EPC) after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in Rules 62-204, 62-210, 62-212, 62-296, or 62-297, F.A.C., or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the source to conduct compliance tests which identify the nature and quantity of pollutant emissions from the source and to provide a report on the results of said tests to the EPC. [Rule 62-297.310(7)(b), F.A.C.]

25. The use of property, facilities, equipment, processes, products, or compounds, or the commission of paint overspraying or any other act, that causes or materially contributes to a public nuisance is prohibited, pursuant to the Hillsborough County Environmental Protection Act, Section 16, Chapter 84-446, Laws of Florida, as Amended.

26. The permittee shall provide timely notification to the Environmental Protection Commission of Hillsborough County prior to implementing any changes that may result in a modification to this permit pursuant to Rule 62-210.200(204)(Modification), F.A.C. The changes do not include normal maintenance, but may include, and are not limited to, the following, and may also require prior authorization before implementation: [Rules 62-210.300 and 62-4.070(3), F.A.C. and 40 CFR 60.15]

A) Alteration or replacement of any equipment* or major component of such equipment listed.
B) Installation or addition of any equipment* which is a source of air pollution.
C) Increased production rate(s).

* Not applicable to routine maintenance, repair, or replacement of component parts.

27. Submit to the Environmental Protection Commission of Hillsborough County each calendar year on or before April 1, completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility", for the preceding calendar year. [Rule 62-210.370(3), F.A.C.]

28. If the permittee wishes to transfer this permit to another owner, an "Application for Transfer of Permit" (DEP Form 62-210.900(7)) shall be submitted, in duplicate, to the Environmental Protection Commission of Hillsborough County within 30 days after the sale or legal transfer of the permitted facility. [Rule 62-4.120, F.A.C.]

29. A minimum of two copies of an application for a federally enforceable state operating permit (FESOP) shall be submitted to the Environmental Protection Commission of Hillsborough County within 90 days of completion of the emissions compliance testing required by this permit or at least 90 days prior to the expiration date of this permit, whichever occurs first. The application shall also include a copy of the required compliance tests. [Rules 62-4.050(2) and 62-210, F.A.C.]

PERMITTEE:
Johnson Controls Battery Group, Inc.

Permit/Certification No.: 0570001-029-AC
Project: Modify Three-Process Operation and Chemset Operations

SPECIFIC CONDITIONS:

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

_____
Richard D. Garrity, Ph.D.
Executive Director