建设项目环境影响报告表

（污染影响类）

（公示版）

3000万件新型元器件技改项目

项目名称：

建设单位（盖章）： 江阴鸿顺新电子科技有限公司

编制日期： 2024年8月

中华人民共和国生态环境部制

一、建设项目基本情况

|  |  |
| --- | --- |
| 建设项目名称 | 3000万件新型元器件技改项目 |
| 项目代码 | 2406-320267-89-02-932760 |
| 建设单位联系人 | 许\*\* | 联系方式 | 137\*\*\*\*5232 |
| 建设地点 | 江阴市周庄镇华宏路17号 |
| 地理坐标 | （ 120 度 23 分 9.042 秒， 31 度 50 分 18.258 秒） |
| 国民经济行业类别 | C3989其他电子元件制造 | 建设项目行业类别 | 三十六、81 电子元件及电子专用材料制造398 |
| 建设性质 | □新建（迁建）☑改建□扩建□技术改造 | 建设项目申报情形 | ☑首次申报项目 □不予批准后再次申报项目□超五年重新审核项目 □重大变动重新报批项目 |
| 项目审批（核准/备案）部门（选填） | 江阴市周庄镇人民政府 | 项目审批（核准/备案）文号（选填） | 江阴周庄备〔2024〕220号 |
| 总投资（万元） | 2500 | 环保投资（万元） | 200 |
| 环保投资占比（%） | 8 | 施工工期 | 3个月 |
| 是否开工建设 | ☑否□是：  | 用地（用海）面积（m2） | 0 |
| 专项评价设置情况 | 表1-1 专项评价设置分析

|  |  |  |  |
| --- | --- | --- | --- |
| **专项评价类别** | **设置原则** | **本项目情况** | **专项设置情况** |
| 大气 | 排放废气含有毒有害污染物、二噁英、苯并〔a〕芘、氰化物、氯气且厂界外500米范围内有环境空气保护目标的建设项目 | 本项目排放铬酸雾废气，属于有毒有害大气污染物，且厂界外500m范围内有敏感目标赵四房庄、东长巷等。 | 设置 |
| 地表水 | 新增工业废水直排建设项目（槽罐车外送污水处理厂的除外）；新增废水直排的污水集中处理厂 | 本项目不新增工业废水直排，不属于污水集中处理厂。 | 无 |
| 环境风险 | 有毒有害和易燃易爆危险物质存储量超过临界量的建设项目 | 本项目危险物质存储量超过临界量。 | 设置 |
| 生态 | 取水口下游500米范围内有重要水生生物的自然产卵场、索饵场、越冬场和洄游通道的新增河道取水的污染类建设项目 | 不涉及 | 无 |
| 海洋 | 直接向海排放污染物的还有工程建设项目 | 不涉及 | 无 |

注：1、废气中有毒有害污染物指纳入《有毒有害大气污染物名录》的污染物（不包括无排放标准的污染物）。1. 环境空气保护目标指自然保护区、风景名胜区、居住区、文化区和农村地区中人群较集中的区域。

3、临界量及其计算方法可参考《建设项目环境风险评价技术导则》（HJ169）附录B、附录C。 |
| 规划情况 | 规划文件：《江阴市周庄镇工业园区详细规划及城市设计》 |
| 规划环境影响评价情况 | 《江阴市周庄镇工业集中区环境影响报告书》江阴市环境保护局《关于江阴市周庄镇工业集中区环境影响报告书的批复》澄环管〔2008〕20号 |
| 规划及规划环境影响评价符合性分析 | 根据《关于公布2024年江阴市园区外优势企业白名单的通知》（澄工改办〔2024〕1号），江阴鸿顺新电子科技有限公司已列入白名单内，属于园区外优势企业，同时本项目在现有厂区内改建，不新增用地，不新增生产废水，总量控制因子铬酸雾总量不超过0.5吨。本项目与《关于江阴市周庄镇工业集中区环境影响报告书的批复》（澄环管〔2008〕20号）相符。 |
| 其他符合性分析 | 相符 |

二、建设项目工程分析

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 建设内容 | 1、项目概况江阴鸿顺新电子科技有限公司成立于2018年12月，位于江阴市周庄镇华宏路17号，主要从事路由器连接器的生产，设计生产能力3亿只/年。该公司《年产3亿只路由器连接器新建项目环境影响报告表》于2019年12月22日通过无锡市行政审批局审批（批复编号：锡行审环许〔2019〕1077号），2022年9月通过一阶段竣工环保自主验收，验收产能为2.4亿只/年，其余待建。现由于企业发展需要，该公司拟在厂区内利用现有厂房2300平方米，淘汰现有镀镍生产线3条，购置国产新型元器件设备（镀镍铬生产线）3台套，淘汰现有路由器连接器6000万只/年，从事新型元器件的生产，设计生产能力为3000万件/a。2、工程内容及建设规模本项目利用现有厂房进行建设，工程内容主要为厂房新增设备购买、安装和调试等环节，公用、辅助工程和环保工程配套设施完善等。本项目主体工程及产品方案见表2-1。表2-1 建设项目主体工程及产品方案

| **序号** | **工程名称（车间、生产装置或生产线）** | **产品名称** | **设计能力** | **年运行****时数(hr)** |
| --- | --- | --- | --- | --- |
| **改建前** | **改建后** | **增减量** |
| 1 | 生产车间 | 路由器连接器 | 3亿只/年 | 2.4亿只/年 | -0.6亿只/年 | 8400，部分2800 |
| 2 | 新型元器件 | 0 | 3000万件/年 | +3000万件/年 |

本项目公用和辅助工程见表2-2。表2-2 本项目公用及辅助工程

|  |  |  |  |
| --- | --- | --- | --- |
| 工程名称 | 建设名称 | 设计能力 | 备注 |
| 扩建前 | 扩建后 | 增减量 |
| 贮运工程 | 原料仓库 | 500m2 | 500m2 | 0 | 用于原料存放，位于室内，依托现有 |
| **易制毒仓库** | **60m2** | **60m2** | **0** | **用于存放盐酸和硫酸，位于室内，依托现有** |
| 易制爆仓库 | 15m2 | 15m2 | 0 | 用于存放硝酸和双氧水，位于室内，现有 |
| **污水处理剂仓库** | **40m2** | **40m2** | **0** | **用于存放污水处理药剂，位于室内，依托现有** |
| 污水处理区 | 硫酸储罐 | 50%，10t×2 | 50%，10t×2 | 0 | 用于污水处理，依托现有 |
| 液碱储罐 | 32%，10t×2 | 32%，10t×2 | 0 | 用于污水处理，依托现有 |
| 次氯酸钠储罐 | 10%，10t×1 | 10%，10t×1 | 0 | 用于污水处理，依托现有 |
| 剧毒仓库 | 15m2 | 15m2 | 0 | 用于存放氰化钾和氰化亚金钾，位于室内，现有 |
| **成品仓库** | **200m2** | **200m2** | **0** | **用于储存成品，位于室内，依托现有** |
| 公用工程 | 给水系统 | 自来水 | DN300 | DN300 | 0 | 当地自来水网，现有 |
| 排水系统 | 雨水管网 | DN300 | DN300 | 0 | 利用区内现有雨水管网，现有 |
| 污水管网 | DN400 | DN400 | 0 | 接入江阴市龙宏污水处理有限公司集中处理，现有 |
| 供汽系统 | DN200 | DN200 | 0 | 江阴周庄热力有限公司，现有 |
| 供电系统 | 2500KVA | 2500KVA | 0 | 利用厂区现有变压器 |
| 环保工程 | 废水处理 | 化粪池 | 20m3×2 | 20m3×2 | 0 | 简单生化处理，现有 |
| 综合废水处理 | 25t/h | 25t/h | 0 | 位于厂区南侧，现有已建，本次利用，其中含铬废水处理原为处理钝化废水装置 |
| 含氰镍氮磷废水处理 | 20t/h | 20t/h | 0 |
| 含铬废水处理 | 4t/h | 4t/h | 0 |
| 废气处理 | 碱喷淋装置 | 10000m3/h×2 | 10000m3/h×2 | 0 | 处理现有产生的酸性气体，处理效率为90%，本项目不涉及，DA001（15m），已建 |
| 10000m3/h×1**35000m3/h×1**20000m3/h×240000m3/h×1 | 10000m3/h×1**35000m3/h×1**20000m3/h×240000m3/h×1 | 0 | **处理现有产生的酸性气体，处理效率为90%，本次依托，DA002（15m），已建** |
| 50000m3/h×135000m3/h×1**20000m3/h×1** | 50000m3/h×135000m3/h×1**20000m3/h×1** | 0 | **处理现有项目产生的酸性废气，处理效率为90%，本项目依托，DA004（15m），已建** |
| 35000m3/h×120000m3/h×1 | 35000m3/h×120000m3/h×1 | 0 | 处理现有项目产生的酸性废气，处理效率为90%，本项目不涉及，DA005（15m），已建 |
| 60000m3/h×273722m3/h×1 | 60000m3/h×273722m3/h×1 | 0 | 处理现有项目产生的酸性废气，处理效率为90%，本项目不涉及，DA006（15m），已建 |
| 次氯酸钠碱喷淋 | 10000m3/h×235000m3/h×120000m3/h×2 | 10000m3/h×235000m3/h×120000m3/h×2 | 0 | 处理现有项目产生的氰化氢，处理效率为90%，本项目不涉及，DA003（25m），已建 |
| 25000m3/h×1 | 25000m3/h×1 | 0 | 处理现有项目产生的氰化氢，处理效率为90%，本项目不涉及，DA007（25m），已建 |
| 凝聚回收装置 | 0 | 10000m3/h×2 | +10000m3/h×2 | 处理铬酸雾废气，经凝聚回收后通入现有碱喷淋装置 |
| 二级活性炭吸附装置 | 10000m3/h×1 | 10000m3/h×1 | 0 | 有机废气净化措施，去除效率达90%，DA008（15m），待建 |
| 固废 | 一般固废堆场 | 50m2 | 50m2 | 0 | 固废分类暂存，依托现有 |
| 危险固废堆场 | 1# | 70m2 | 70m2 | 0 |
| 2# | 70m2 | 70m2 | 0 |
| 噪声防治工程 | ≥25dB（A） | ≥25dB（A） | - | 厂界达标 |
| 风险 | 事故池 | 180m3×1 | 180m3×1 | 0 | 依托现有 |
| 300m3×1 | 300m3×1 | 0 |

3、原辅材料及理化性质略4、主要设备本项目涉及的主要设备见表2-5。表2-5 主要设备清单

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **序号** | **主要设备** | **规格、型号** | **数量（台/套/条）** | **备注** |
| **技改前** | **技改后** | **增减量** |
| 1 | 镀金生产线 | 半自动镀金生产线 | 1机12线 | 2 | 2 | 0 | 已建1条 |
| 2 | 全自动滚镀金生产线 | 1机1线 | 2 | 2 | 0 | 待建 |
| 3 | 全自动挂镀金生产线 | 1机1线 | 3 | 3 | 0 | 已建2条 |
| 4 | 全自动连续镀金生产线 | 1机2线 | 2 | 2 | 0 | 已建 |
| 5 | 全自动环形镀金生产线 | 1机2线 | 3 | 3 | 0 | 已建2条 |
| 6 | 镀银生产线 | 全自动滚镀银生产线 | 1机1线 | 3 | 3 | 0 | 已建 |
| 7 | 全自动挂镀银生产线 | 1机1线 | 3 | 3 | 0 | 已建 |
| 8 | 全自动连续镀银生产线 | 1机2线 | 3 | 3 | 0 | 已建 |
| 9 | 全自动环形镀银生产线 | 1机2线 | 3 | 3 | 0 | 已建 |
| 10 | 镀锡铜合金生产线 | 半自动镀锡铜生产线 | 1机12线 | 1 | 1 | 0 | 已建 |
| 11 | 全自动滚镀锡铜生产线 | 1机1线 | 2 | 2 | 0 | 待建 |
| 12 | 全自动挂镀铜生产线 | 1机1线 | 1 | 1 | 0 | 已建 |
| 13 | 全自动连续镀铜生产线 | 1机2线 | 1 | 1 | 0 | 待建 |
| 14 | 全自动环形镀铜生产线 | 1机2线 | 1 | 1 | 0 | 待建 |
| 15 | 镀锡镍生产线 | 全自动1机1线 | 6 | 6 | 0 | 已建 |
| 16 | 镀铜生产线 | 半自动镀铜生产线 | 1机12线 | 2 | 2 | 0 | 已建1条 |
| 17 | 全自动连续镀铜生产线 | 1机2线 | 1 | 1 | 0 | 待建 |
| 18 | 镀镍生产线 | 全自动1机1线 | 7 | 4 | -3 | 已建，本次淘汰3条 |
| 19 | 铝锡钝化线 | / | 5 | 5 | 0 | 已建 |
| 20 | 国产新型元器件设备 | 连续设备 | 0 | 3 | +3 | 本次新建 |
| 21 | 塑封机 | 2.5KW | 25 | 25 | 0 | 待建 |
| 22 | 插针机 | TE自动 | 8 | 8 | 0 | 已建2台 |
| 23 | 磨光机 | 磁力研磨 | 20 | 20 | 0 | 待建 |
| 24 | 分条机 | FR-1300C | 73 | 73 | 0 | 已建1台 |
| 25 | 冲压机 | ROK-C-100 | 50 | 50 | 0 | 已建3台，本次利用 |
| 26 | 环保设备 | / | 1 | 1 | 0 | 已建 |
| 27 | 拉丝机 | BF1WDM | 12 | 12 | 0 | 已建 |

表2-6 本项目主要设备清单

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **序号** | **名称** | **规格** | **数量（台套）** | **备注** |
| 1 | 冲压机 | ROK-C-100 | 2 | 本次利用 |
| 2 | 行车 | DMG龙门吊 | 6 | 新增 |
| 3 | 升降机 | / | 3 | 新增 |
| 4 | 整流机 | GP-500A15V | 32 | 新增 |
| 5 | 过滤机 | 1004型 | 3 | 新增 |
| 6 | 废气塔 | / | 1 | 本次利用 |
| 7 | 连体槽体 | 清洗、除油等 | 20 | 新增 |
| 8 | 滚筒 | / | 76 | 新增 |
| 9 | 动力配电柜 | / | 3 | 新增 |
| 10 | 叉车 | 3T | 1 | 新增 |

5、建设项目厂区平面布置情况本项目拟建地位于江阴市周庄镇华宏路17号。厂区由北向南设置9车间、8车间、6车间、5车间、3车间、2车间、1车间、15车间、16车间、17车间及污水处理设施等，厂区平面布置见附图2。6、劳动定员及工作制度劳动定员：本项目新增员工200人，本项目扩建后全厂劳动定员为320人。工作制度：本项目实行“三班”24小时制，年有效工作日为350天。 |

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| --- | --- |
| 工艺流程和产排污环节 | **1、生产工艺**本项目主要从事新型元器件的生产，具体生产工艺流程及产污环节见图2-3（图中G-废气、S-固废、W-废水、N-噪声）。图2-3 新型元器件生产工艺流程图 |
| 与项目有关的原有环境污染问题 | **1、现有项目环保手续情况**江阴鸿顺新电子科技有限公司成立于2018年12月，位于江阴市周庄镇华宏路17号，现有项目建设、审批及验收情况如表2-8所示。表2-8 现有项目建设、审批以及验收情况

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **项目名称** | **产品方案（t/a）** | **环评批复** | **“三同时”竣工验收** | **备注** |
| 《年产3亿只路由器连接器新建项目》环境影响报告表 | 路由器连接器 | 3亿只 | 无锡市行政审批局锡行审环许〔2019〕1077号2019.10.22 | 2022.9通过企业自主阶段验收，验收产能为2.4亿只/年 | 已建 |
| 《废气治理设施改建项目》登记表 | / | / | 备案号：2022320281000012632022.9.22 | / | 已建 |
| 《废水处理设施改建项目》登记表 | / | / | 备案号：2022320281000012652022.9.22 | / | 已建 |

现有项目已于2020-12-31取得固定污染源排污证，有效期至2025-12-30，登记编号：91320281MA1XMH2240001W。本项目实施前或者在实际排污之前企业需及时重新申领排污许可证。 |

三、区域环境质量现状、环境保护目标及评价标准

|  |  |
| --- | --- |
| 区域环境质量现状 | **1、环境空气**根据《江阴市生态环境状况公报（2023年度）》，2023年，全市PM2.5年平均浓度32微克/立方米，空气优良天数293天，优良天数比率为80.3%，达历史最佳水平。全市空气SO2年平均浓度为8.3微克/立方米，达到一级标准；NO2年平均浓度为37.2微克/立方米，达到一级标准；PM10年平均浓度为54.0微克/立方米，达到二级标准，全省排名同比上升3名；CO年平均浓度1.223毫克/立方米，达到一级标准；O3年平均浓度173微克/立方米。因此，该区域为不达标区。**2、地表水**根据《江阴市生态环境状况公报（2023年度）》，16条重点河流中，长江、应天河、桃花港、石牌港、申港河、利港河、老夏港河等7条河流水质状况为优；白屈港、东横河、东清河、二干河、青祝运河、锡澄运河、新沟河、新夏港河、张家港河等9条河流水质状况为良好。与2022年相比，2023年全市16条重点河流中，桃花港水质由良好转为优，白屈港、东横河、新夏港河水质由优转为良好；其余12条河流水质未有明显变化。**3、环境噪声**根据《江阴市生态环境状况公报（2023年度）》，2023年，全市昼间和夜间声环境质量基本保持稳定，声环境质量总体较好。本项目位于2类声环境功能区，厂界周边50米范围内不存在声环境保护目标，因此无需进行声环境质量现状监测。**4、生态环境**本项目不属于产业园区外新增用地，因此无需进行生态现状调查。**5、电磁辐射**本项目不属于新建或改建、扩建广播电台、差转台、电视塔台等电磁辐射类项目，因此无需开展电磁辐射现状调查。**6、地下水**本项目周边无地下水、土壤保护目标，仓库、生产车间、危废仓库等区域均做好防腐防渗及防泄漏措施，正常工况下，不存在地下水环境污染途径，故不开展地下水环境现状调查。**7、土壤**本项目不存在土壤环境污染途径，故不开展土壤环境现状调查。**8、区域主要存在的环境问题**根据《江阴市生态环境状态公报（2023年度）》，该区域空气环境质量有超标现象，O3超出《环境空气质量标准》（GB3095-2012）表1中二级标准。项目所在地属于不达标区。根据《无锡市大气环境质量限期达标规划（正式稿）》，无锡市达标规划的规划范围为：整个无锡市全市范围（4650平方公里），无锡市区面积1643.88平方公里，另有太湖水域397.8平方公里。下辖共5个区2个市（梁溪区、滨湖区、惠山区、锡山区、新吴区、江阴市、宜兴市）、7个镇、41个街道。达标期限：无锡市环境空气质量在2025年实现全面达标。远期目标：力争到2025年，无锡市环境空气质量达到国家二级标准要求，PM2.5浓度达到35µg/m3左右。总体战略：以空气质量达标为核心目标，推进能源结构调整，优化产业结构和布局，加快推进挥发性有机物综合整治，深化火电行业超低排放和工业锅炉整治成果，推进热点整合，提高扬尘管理水平，促进PM2.5和臭氧协同控制，推进区域联防联控，提高大气污染精细化防控能力。到2025年，实施清洁能源利用，优化能源结构。推进低VOCs含量原辅料替代。大幅度提升新能源汽车特别是电动车比例。升级工艺技术，优化工艺流程，提高各行业清洁生产水平。实现PM2.5和臭氧的协调控制。 |
| 环境保护目标 | （1）大气环境：500m范围内敏感目标见表3-6，周边500米范围内无空气自动站。表3-6 环境空气保护目标一览表

| **名称** | **坐标** | **保护对象** | **保护内容** | **环境功能区** | **相对厂址方位** | **相对厂界距离/m** |
| --- | --- | --- | --- | --- | --- | --- |
| **X（°）** | **Y（°）** |
| 赵四房庄 | 120.387996 | 31.838369 | 居住区 | 65户/228人 | 二类区 | E | 130 |
| 东长巷 | 120.382926 | 31.836377 | 居住区 | 24户/84人 | 二类区 | SW | 243 |
| 蒋巷上 | 120.388613 | 31.843468 | 居住区 | 10户/35人 | 二类区 | N | 384 |
| 养老服务中心 | 120.389514 | 31.842347 | 居住区 | 100人 | 二类区 | NE | 418 |
| 东场 | 120.383409 | 31.833761 | 居住区 | 20户/70人 | 二类区 | SW | 399 |

（2）声环境：本项目厂界外50m范围内无声环境保护目标。（3）地下水环境：本项目500m范围内无地下水保护目标。（4）生态环境：本项目不属于产业园区外新增用地的，不涉及生态环境保护目标。表3-7 地下水、生态环境保护目标

|  |  |  |  |
| --- | --- | --- | --- |
| **环境要素** | **环境保护目标** | **距建设项目厂界** | **环境功能** |
| **方位** | **距离(m)** | **规模** |
| 地下水 | / | / | / | / | / |
| 生态环境 | / | / | / | / | / |

 |
| 总量控制指标 | 根据无锡市江阴生态环境局发布的文件《江阴市排污总量指标管理办法（试行）》（澄政办发〔2023〕14号）的要求，结合项目排污特征，确定总量控制因子为：废水：COD、NH3-N、TP、TN，特征因子为SS、总铜；废气：/，特征因子为硫酸雾、碱雾；固废：各类固废。建设项目污染物排放总量指标见表3-12。表3-12 建设项目污染物排放总量指标（单位：t/a）

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **类别** | **污染物名称** | **现有项目** | **本项目** | **“以新带老”削减量** | **扩建后全厂排放量** | **排放增减量** |
| **实际排放量** | **核定排放量** | **产生量** | **削减量** | **排放量** |
| 废气 | 有组织 | 硫酸雾 | 0.0757 | 0.0946 | 2.4975 | 2.2477 | 0.2498 | 0.0073 | 0.3371 | +0.2425 |
| 氯化氢 | 0.0307 | 0.0384 | 2.7495 | 2.4745 | 0.275 | 0.003 | 0.3104 | +0.272 |
| 甲基磺酸 | 0.0157 | 0.0196 | 0 | 0 | 0 | 0 | 0.0196 | 0 |
| 氰化氢 | 0.0042 | 0.0052 | 0 | 0 | 0 | 0 | 0.0052 | 0 |
| 非甲烷总烃 | 0 | 0.0149 | 0 | 0 | 0 | 0 | 0.0149 | 0 |
| 碱雾 | 0 | 0 | 0.0972 | 0.0875 | 0.0097 | 0 | 0.0097 | +0.0097 |
| 铬酸雾 | 0 | 0 | 0.1099 | 0.1044 | 0.0055 | 0 | 0.0055 | +0.0055 |
| 无组织 | 硫酸雾 | 0.0842 | 0.1052 | 0.2775 | 0 | 0.2775 | 0.0081 | 0.3746 | +0.2694 |
| 氯化氢 | 0.0342 | 0.0427 | 0.3055 | 0 | 0.3055 | 0.0033 | 0.3449 | +0.3022 |
| 甲基磺酸 | 0.0174 | 0.0217 | 0 | 0 |  | 0 | 0.0217 | 0 |
| 氰化氢 | 0.0046 | 0.0058 | 0 | 0 |  | 0 | 0.0058 | 0 |
| 非甲烷总烃 | 0 | 0.0165 | 0 | 0 |  | 0 | 0.0165 | 0 |
| 碱雾 | 0 | 0 | 0.0108 | 0 | 0.0108 | 0 | 0.0108 | +0.0108 |
| 铬酸雾 | 0 | 0 | 0.0122 | 0 | 0.0122 | 0 | 0.0122 | +0.0122 |
| 合计 | 硫酸雾 | 0.1599 | 0.1998 | 2.775 | 2.2477 | 0.5273 | 0.0154 | 0.7117 | +0.5119 |
| 氯化氢 | 0.0649 | 0.0811 | 3.055 | 2.4745 | 0.5805 | 0.0063 | 0.6553 | +0.5742 |
| 甲基磺酸 | 0.0331 | 0.0413 | 0 | 0 | 0 | 0 | 0.0413 | 0 |
| 氰化氢 | 0.0088 | 0.011 | 0 | 0 | 0 | 0 | 0.011 | 0 |
| 非甲烷总烃 | 0 | 0.0314 | 0 | 0 | 0 | 0 | 0.0314 | 0 |
| 碱雾 | 0 | 0 | 0.108 | 0.0875 | 0.0205 | 0 | 0.0205 | +0.0205 |
| 铬酸雾 | 0 | 0 | 0.1221 | 0.1044 | 0.0177 | 0 | 0.0177 | +0.0177 |
| 废水 | 废水量 | 38500/38500 | 42977.55/42977.55 | 11308.1 | 4850.1 | 6458 | 894 | 48541.55/48541.55 | +5564/5564 |
| COD | 2.9440/1.9250 | 3.3249/2.1489 | 4.3726 | 1.681 | 2.6916/0.3229 | 0.0671/0.0447 | 5.9494/2.4271 | +2.6245/0.2782 |
| SS | 1.9680/0.3850 | 2.1965/0.4298 | 3.1661 | 1.1203 | 2.0458/0.0646 | 0.0447/0.0089 | 4.1976/0.4855 | +2.0011/0.0557 |
| 氨氮 | 0.1008/0.0134 | 0.1008/0.0134 | 0.252 | 0 | 0.252/0.0224 | 0 | 0.3528/0.0358 | +0.252/0.0224 |
| TN | 0.1512/0.0403 | 0.1512/0.0403 | 0.392 | 0 | 0.392/0.0672 | 0 | 0.5432/0.1075 | +0.392/0.0672 |
| TP | 0.0134/0.0017 | 0.0134/0.0017 | 0.0448 | 0 | 0.0488/0.0028 | 0 | 0.0582/0.0045 | +0.0448/0.0028 |
| 总铜 | 0.0155/0.0002 | 0.0198/0.0002 | 0.0129 | 0.0116 | 0.0013/0.0004 | 0.0004/0 | 0.0207/0.0006 | +0.0009/0.0004 |
| 总锡 | 0.1550/0.0035 | 0.1981/0.004 | 0 | 0 | 0 | 0 | 0.1981/0.004 | 0 |
| 石油类 | 0 | 0 | 0.0108 | 0.0099 | 0.0009/0.0009 | 0 | 0.0009/0.0009 | +0.0009/0.0009 |
| 总铬 | 0 | 0 | 0.2225 | 0.2225 | 0 | 0 | 0 | 0 |
| 六价铬 | 0 | 0 | 0.2225 | 0.2225 | 0 | 0 | 0 | 0 |
| 总镍 | 0 | 0 | 0.2079 | 0.2079 | 0 | 0 | 0 | 0 |
| 固废 | 一般固废 | 0 | 0 |  |  | 0 | 0 | 0 | 0 |
| 危险废物 | 0 | 0 |  |  | 0 | 0 | 0 | 0 |
| 生活垃圾 | 0 | 0 |  |  | 0 | 0 | 0 | 0 |

注：现有项目实际排放量仅统计现有已建项目，“/”前指接管量，“/”后指排入外环境的量。由上表可见，本项目全厂新增废水接管量为5564t/a，其中生产废水总量削减36t/a，COD、SS、总铜、石油类接管量增加0.1045t/a、0.0411t/a、0.0009t/a、0.0009t/a，总量控制因子COD、SS排放量削减0.0018t/a、0.0003t/a，特征因子总铜、石油类排放量增加0.0004t/a、0.0009t/a；生活污水总量增加5600t/a，COD、SS、氨氮、TN、TP接管量分别增加2.52t/a、1.96t/a、0.252t/a、0.392t/a、0.0448t/a，总量控制因子COD、氨氮、TP、TN排放量增加0.28t/a、0.0224t/a、0.0672t/a、0.0028t/a。综上，全厂COD、SS、氨氮、TN、TP、总铜、石油类接管量分别增加2.6245t/a、2.0011t/a、0.252t/a、0.392t/a、0.0448t/a、0.0009t/a、0.0009t/a，总量控制因子COD、氨氮、TP、TN排放量增加0.2782t/a、0.0224t/a、0.0672t/a、0.0028t/a。根据总量控制原则，COD、氨氮、TP、TN新增排放总量指标在江阴市周庄镇控源截污内平衡；特征因子SS、总铜、石油类排放总量增加0.0557t/a、0.0004t/a、0.0009t/a，作为该企业考核指标。本项目建成后新增废气污染物排放为：硫酸雾0.5119t/a（有组织0.2425t/a、无组织0.2694t/a）、铬酸雾0.0177t/a（有组织0.0055t/a、无组织0.0122t/a）、氯化氢0.5742t/a（有组织0.272t/a、无组织0.3022t/a）、碱雾0.0205t/a（有组织0.0097t/a、无组织0.0108t/a）作为该企业考核指标。固体废物排放量为零，符合总量控制要求。 |

四、主要环境影响和保护措施

|  |  |
| --- | --- |
| 施工期环境保护措施 | 本项目利用现有闲置厂房进行建设，施工期工程主要包括厂房内部布局调整、新增设备的购买、安装、调试等；公用工程和辅助工程包括贮运工程、环保工程和其它配套工程的完善建设。施工期较短，因此施工期产生的粉尘、噪声和废污水较小，经采取合理的防范措施后，对周围环境影响不大。 |
| 运营期环境影响和保护措施 | **1、废气**1.1废气产排情况本项目废气主要为酸洗、镀镍工序产生的硫酸雾、氯化氢，镀铬工序产生的铬酸雾，中和过程产生的碱雾。 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 运营期环境影响和保护措施 | 表4-1 废气污染源源强核算结果及相关参数一览表

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **工序/生产线** | **装置** | **废气编号** | **污染源** | **污染物** | **污染物产生** | **治理措施** | **污染物排放** | **排放标准** | **排放时间（h）** |
| **核算方法** | **废气产生量（m**3**/h）** | **产生浓度（mg/m**3**）** | **产生速率（kg/h）** | **产生量（t/a）** | **收集效率%** | **治理** | **是否为可行技术** | **处理****效率%** | **废气排放量（m**3**/h）** | **排放浓度（mg/m**3**）** | **排放速率（kg/h）** | **排放量（t/a）** | **浓度（mg/m**3**）** | **速率（kg/h）** |
| **工艺** |
| 7车间 | 新型元器件生产线 | G1、G4 | 排气筒DA004 | 氯化氢 | 产污系数法 | 20000 | 43.65  | 0.873  | 1.8333  | 90 | 铬酸雾先经回收处理后一起通过10#碱喷淋 | 是 | 90 | 105000 | 0.85  | 0.089  | 0.1873  | 10 | 0.18 | 2100 |
| G2、G3 | 硫酸雾 | 39.64  | 0.793  | 1.6650  | 90 | 0.80  | 0.084  | 0.1762  | 5 | 1.1 |
| G5、G7 | 碱雾 | 1.54  | 0.031  | 0.0648  | 90 | 0.03  | 0.003  | 0.0065  | 10 | / |
| G6 | 铬酸雾 | 1.75  | 0.035  | 0.0733  | 95 | 0.02  | 0.002  | 0.0037  | 0.05 | 0.005 |
| 7车间 | 镀锡铜生产线 | / | 氯化氢 | 现有项目 | 0.23  | 0.005  | 0.0099  | 90 | 90 | / | 2100 |
| / | 硫酸雾 | 0.58  | 0.012  | 0.0243  | 90 | 2100 |
| 5车间 | 镀锡镍生产线 | / | 氯化氢 | 35000 | 0.13  | 0.005  | 0.0099  | 90 | 8#碱喷淋 | 是 | 90 | 2100 |
| / | 硫酸雾 | 0.33  | 0.012  | 0.0243  | 90 | 2100 |
| 6车间 | 镀锡镍生产线 | / | 氯化氢 | 50000 | 0.19  | 0.009  | 0.0197  | 90 | 9#碱喷淋 | 是 | 90 | 2100 |
| / | 硫酸雾 | 0.46  | 0.023  | 0.0485  | 90 | 2100 |
| 7-3车间 | 新型元器件生产线 | G1、G4 | 排气筒DA002 | 氯化氢 | 产污系数法 | 35000 | 12.47  | 0.436  | 0.916  | 90 | 铬酸雾先经回收处理后一起通过4#碱喷淋 | 是 | 90 | 125000 | 0.372  | 0.0464  | 0.0975  | 10 | 0.18 | 2100 |
| G2、G3 | 硫酸雾 | 11.33  | 0.396  | 0.833  | 90 | 0.373  | 0.0466  | 0.0978  | 5 | 1.1 | 2100 |
| G5、G7 | 碱雾 | 0.44  | 0.015  | 0.032  | 90 | 0.012  | 0.0015  | 0.0032  | 10 | / | 2100 |
| G6 | 铬酸雾 | 0.50  | 0.017  | 0.037  | 95 | 0.007  | 0.0009  | 0.0018  | 0.05 | 0.005 | 2100 |
| 3车间 | 铝锡钝化线 | / | 氯化氢 | 现有项目 | 10000 | 0.94  | 0.009  | 0.0197  | 90 | 3#碱喷淋 | 是 | 90 | / | 2100 |
| / | 硫酸雾 | 2.31  | 0.023  | 0.0485  | 90 | 2100 |
| 10车间 | 铝锡钝化线 | / | 氯化氢 | 20000 | 0.23  | 0.005  | 0.0099  | 90 | 5#碱喷淋 | 是 | 90 | 2100 |
| / | 硫酸雾 | 0.58  | 0.012  | 0.0243  | 90 | 2100 |
| 11车间 | 镀银、镀铜生产线 | / | 氯化氢 | 20000 | 0.47  | 0.009  | 0.0197  | 90 | 6#碱喷淋 | 是 | 90 | 2100 |
| / | 硫酸雾 | 1.16  | 0.023  | 0.0485  | 90 | 2100 |
| 112 | 镀镍生产线 | / | 氯化氢 | 40000 | 0.12  | 0.005  | 0.0099  | 90 | 7#碱喷淋 | 是 | 90 | 2100 |
| / | 硫酸雾 | 0.29  | 0.012  | 0.0243  | 90 | 2100 |
| 7-3车间、10车间、11车间 | 无组织排放 | 氯化氢 | / | / | / | 0.0125  | 0.1051  | / | / | / | / | 0.0125  | 0.1051  | 0.05 | / | 8400 |
| 硫酸雾 | / | / | / | 0.0120  | 0.1006  | / | / | / | / | 0.0120  | 0.1006  | 0.3 | / | 8400 |
| 氰化氢 | / | / | / | 0.00005  | 0.0004  | / | / | / | / | 0.00005  | 0.0004  | 0.024 | / | 8400 |
| 碱雾 | / | / | / | 0.0004  | 0.0036  | / | / | / | / | 0.0004  | 0.0036  | / | / | 8400 |
| 铬酸雾 | / | / | / | 0.0005  | 0.0041  | / | / | / | / | 0.0005  | 0.0041  | 0.002 | / | 8400 |
| 7车间 | 氯化氢 | / | / | / | 0.0244  | 0.2048  | / | / | / | / | 0.0244  | 0.2048  | 0.05 | / | 8400 |
| 硫酸雾 | / | / | / | 0.0223  | 0.1877  | / | / | / | / | 0.0223  | 0.1877  | 0.3 | / | 8400 |
| 碱雾 | / | / | / | 0.0009  | 0.0072  | / | / | / | / | 0.0009  | 0.0072  | / | / | 8400 |
| 铬酸雾 | / | / | / | 0.0010  | 0.0081  | / | / | / | / | 0.0010  | 0.0081  | 0.002 | / | 8400 |

注：DA002和DA004与现有项目污染源一起统计。由表4-1可知，本项目有组织排放的硫酸雾、氯化氢、铬酸雾有组织废气可达江苏省地方标准《大气污染物综合排放标准》（DB32/4041-2021）表1标准，有组织排放的碱雾可达上海市地方标准《大气污染物综合排放标准》（DB31/933-2015）表1标准，通过采取加强车间通风，便于扩散等措施后，无组织排放硫酸雾、铬酸雾、氯化氢废气可达江苏省地方标准《大气污染物综合排放标准》（DB32/4041-2021）表3标准，对环境影响较小。**2、废水****2.1废水产排情况** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 运营期环境影响和保护措施 | 表4-7 废水污染源源强核算结果及相关参数一览表

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **工序/**生产线 | **污染源** | **污染物** | **污染物产生** | **治理设施** | **污染物排放** | **标准浓度限值(mg/L)** | **排放方式和去向** |
| **核算方法** | **产生废水量（m**3**/a**） | **产生浓度/**（**mg/L**） | **产生量/**（**t/a**） | **处理能力** | **处理工艺** | **是否为可行性技术** | **处理效率%** | **核算方法** | **排放废水量（m**3**/a**） | **排放浓度（mg/L**） | **排放量（t/a**） |
| 中和、镀铬后清洗 | 含铬废水 | pH | 类比法 | 1208.6 | 3~5 | / | 4t/h | 含铬废水处理设施（反应+沉淀+浓缩） | 是 | / | / | 回用于浓水制纯及清洗环节，蒸发结晶委托有资质单位处置 |
| COD | 280.7  | 0.3393  | / |
| SS | 150.2  | 0.1815  | / |
| 总铬 | 物料衡算法 | 184.1  | 0.2225  | / |
| 六价铬 | 184.1  | 0.2225  | / |
| 镀镍后清洗、漂白、中和 | 含镍废水 | pH | 类比法 | 1639.4 | 5~6 | / | 20t/h | 含氰镍氮磷废水处理设施（反应+沉淀+浓缩） | 是 | / |
| COD | 267.2  | 0.4381  | / |
| SS | 134.4  | 0.2204  | / |
| 总镍 | 物料衡算法 | 126.8  | 0.2079  | / |
| 酸洗后清洗等 | 综合废水 | COD | 类比法 | 2860.1 | 278.07  | 0.7953  | 25t/h | 综合废水处理设施（反应+沉淀+生化+MBR+RO） | 是 | 28.08  | 类比法 | 858 | 200/50 | 0.1716/0.0429 | 500/50 | 约1896t/a回用，858t/a接入江阴市龙宏污水处理有限公司，其余进入污泥 |
| SS | 183.29  | 0.5242  | 45.44  | 100/10 | 0.0858/0.0086 | 400/10 |
| 石油类 | 3.76  | 0.0108  | 73.40  | 1/1 | 0.0009/0.0009 | 20/1 |
| 总铜 | 4.51  | 0.0129  | 66.75  | 1.5/0.5 | 0.0013/0.0004 | 2/0.5 |
| 员工生活 | 生活污水 | COD | 类比法 | 5600 | 500 | 2.8 | / | 化粪池 | 是 | 10.00  | 类比法 | 5600 | 450/50 | 2.52/0.28 | 500/50 | 接入江阴市龙宏污水处理有限公司 |
| SS | 400 | 2.24 | 12.50  | 350/10 | 1.96/0.056 | 400/10 |
| 氨氮 | 45 | 0.252 | 0.00  | 45/4 | 0.252/0.0224 | 45/4 |
| 总氮 | 70 | 0.392 | 0.00  | 70/12 | 0.392/0.0672 | 70/12 |
| 总磷 | 8 | 0.0448 | 0.00  | 8/0.5 | 0.0448/0.0028 | 8/0.5 |
| 废水合计 | COD | / | 11308.1 | 396.46  | 4.3726  | / | / | / | / | / | 6458 | 416.8/50 | 2.6916/0.3229 | 500/50 | 间接排放，接入江阴市龙宏污水处理有限公司 |
| SS | 287.06  | 3.1661  | 316.8/10 | 2.0458/0.0646 | 400/10 |
| 氨氮 | 22.85  | 0.2520  | 39.02/3.47 | 0.252/0.0224 | 45/4 |
| 总氮 | 35.54  | 0.3920  | 60.70/10.41 | 0.392/0.0672 | 70/12 |
| 总磷 | 4.06  | 0.0448  | 6.94/0.43 | 0.0448/0.0028 | 8/0.5 |
| 石油类 | 0.97  | 0.0108  | 0.13/0.13 | 0.0009/0.0009 | 20/1 |
| 总铜 | 1.17  | 0.0129  | 0.20/0.07 | 0.0013/0.0004 | 2/0.5 |
| 总铬 | 20.17  | 0.2225 | / | / | / |
| 六价铬 | 20.17  | 0.2225 | / | / | / |
| 总镍 | 18.85  | 0.2079 | / | / | / |

注：“/”前指进入污水处理厂的接管量，“/”后指污水处理厂外排量。由上表可见，本项目废水接管COD、SS、氨氮、总氮、总磷、总铜、石油类可达接管标准。 |

|  |  |
| --- | --- |
| 运营期环境影响和保护措施 | **3、噪声**本项目噪声源主要为国产新型元器件设备、冲压机（利用现有）、叉车、行车等设备，噪声源强≤90dB(A)。本项目建成后，厂界噪声贡献值可达到《工业企业厂界环境噪声排放标准》（GB12348-2008）2/4类限值，厂界周围50米范围内无声环境保护目标，对声环境影响较小。建设单位针对噪声产生特点，经过①采用低噪声设备，合理布局；②车间墙壁实砌，可有效隔声；③对设备进行经常性维护，保持设备处于良好的运转状态，同时加强内部管理，合理作业，避免不必要的突发性噪声，确保厂界噪声达标排放。**4、固体废物** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 运营期环境影响和保护措施 | 表4-21 固体废物污染源源强核算结果及相关参数一览表

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **工序/生产线** | **装置** | **固体废物名称** | **固废属性** | **产生情况** | **处置措施** | **最终去向** |
| **核算方法** | **产生量/(t/a)** | **工艺** | **处置量/(t/a)** |
| 冲压 | 冲压机 | 金属边角料 | 一般工业固体废物 | 类比法 | 15 | / | 15 | 综合利用 |
| 检验 | / | 不合格品 | 类比法 | 5 | / | 5 |
| 包装 | / | 可回收包装材料 | 类比法 | 0.5 | / | 0.5 |
| 冲压 | 冲压 | 废液压油 | 危险废物 | 类比法 | 1 | / | 1 | 江苏杭富环保科技有限公司 |
| 除油 | 元器件设备 | 除油废液 | 物料衡算法 | 15.2 | / | 15.2 | 江苏杭富环保科技有限公司 |
| 酸洗 | 元器件设备 | 废酸液 | 物料衡算法 | 22.8 | / | 22.8 | 江苏维达环保科技有限公司 |
| 酸洗 | 元器件设备 | 废酸液 | 物料衡算法 | 22.8 | / | 22.8 | 江苏维达环保科技有限公司 |
| 镀铬 | 元器件设备 | 镀铬废液 | 物料衡算法 | 47.5 | / | 47.5 | 江苏杭富环保科技有限公司 |
| 钝化 | 元器件设备 | 钝化废液 | 物料衡算法 | 22.8 | / | 22.8 | 江苏维达环保科技有限公司 |
| 镀镍、镀铬 |  | 废滤芯 | 类比法 | 5 | / | 5 | 江苏杭富环保科技有限公司 |
| 污水处理 | / | 废离子交换树脂 | 物料衡算法 | 20 | / | 20 | 江苏杭富环保科技有限公司 |
| 污水处理 | / | 含镍污泥 | 物料衡算法 | 102.5 | / | 102.5 | 江苏杭富环保科技有限公司 |
| 污水处理 | / | 含铬污泥 | 物料衡算法 | 67.4 | / | 67.4 | 江苏杭富环保科技有限公司 |
| 污水处理 | / | 综合废水处理污泥 | 物料衡算法 | 317.5 | / | 317.5 | 江苏杭富环保科技有限公司 |
| 油类包装 | / | 废油桶 | 物料衡算法 | 0.5 | / | 0.5 | 江苏杭富环保科技有限公司 |
| 包装 | / | 不可回收包装材料 | 类比法 | 1.2 | / | 1.2 | 江苏杭富环保科技有限公司 |
| 蒸发处理 | / | 蒸发残渣 | 物料衡算法 | 115.44 | / | 115.44 | 江苏杭富环保科技有限公司 |
| 职工活动 | / | 生活垃圾 | 生活垃圾 | 产污系数法 | 40.8 | / | 40.8 | 环卫部门统一处置 |

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| --- | --- |
| 运营期环境影响和保护措施 | 项目所产生的固体废物通过以上方法处理处置后，将不会对周围的环境产生影响，亦不会造成二次污染。但必须指出的是，固体废物处理处置前在厂内的堆放、贮存场所应按照国家固体废物贮存有关要求设置，避免其对周围环境产生二次污染。通过以上措施，建设项目产生的固体废物均得到了妥善处置和利用，对外环境的影响可减至最小程度。 |

五、环境保护措施监督检查清单

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 内容要素 | 排放口(编号、名称)/污染源 | 污染物项目 | 环境保护措施 | 执行标准 |
| 大气环境 | DA002酸洗、镀镍、镀铬、中和 | 硫酸雾 | 铬酸废气经回收后与其他废气一起经碱液喷淋处理 | 5 | 1.1 | 《大气污染物综合排放标准》（DB32/4041-2021）表1 |
| 氯化氢 | 10 | 0.18 |
| 铬酸雾 | 0.05 | 0.005 |
| 碱雾 | 10 | / | 《大气污染物综合排放标准》（DB31/933-2015）表1标准 |
| DA004酸洗、镀镍、镀铬、中和 | 硫酸雾 | 铬酸废气经回收后与其他废气一起经碱液喷淋处 | 5 | 1.1 | 《大气污染物综合排放标准》（DB32/4041-2021）表1 |
| 氯化氢 | 10 | 0.18 |
| 铬酸雾 | 0.05 | 0.005 |
| 碱雾 | 10 | / | 《大气污染物综合排放标准》（DB31/933-2015）表1标准 |
| 地表水环境 | DW001 | COD | 废水处理站化粪池 | 500mg/L | 《电子工业水污染物排放标准》（GB39731-2020）表1 |
| SS | 400mg/L |
| 氨氮 | 45mg/L |
| 总磷 | 8mg/L |
| 总氮 | 70mg/L |
| 总铜 | 2.0mg/L |
| 石油类 | 20mg/L |
| 声环境 | 元器件生产线 | 噪声源强≤90dB（A） | 选择用低噪声设备，设备设置于室内，车间厂房隔声，距离衰减 | 《工业企业厂界环境噪声排放标准》（GB12348-2008）表1中2类/4类标准 |
| 冲压机 |
| 叉车 |
| 电磁辐射 | / | / | / | / |
| 固体废物 | 一般固废堆场：50m2，本项目一般固废主要为金属边角料、可回收包装材料、不合格品，收集后综合利用；危废堆场：1#：70m2，2#：70m2，本项目危险废物主要为废液压油、废酸液、废离子交换树脂、含镍污泥、含铬污泥、综合废水处理污泥、蒸发残渣、废油桶，委托有资质单位处置；生活垃圾由环卫部门统一清运。 |
| 土壤及地下水污染防治措施 | ①重点防渗区（危废堆场、废水处理站、原辅料仓库）防渗要求为等效黏土防渗层Mb≥6.0m，K≤1×10-7cm/s或参照GB18598执行；②一般防渗区（一般固废堆场、生产车间）防渗要求：等效黏土防渗层Mb≥1.5m，K≤1×10-7cm/s或参照GB16889执行；③简单防渗区（办公区）防渗要求：一般地面硬化。 |
| 生态保护措施 | 本项目不涉及。 |
| 环境风险防范措施 | 包括原料贮运安全防范措施、泄漏事故的防范措施、安全生产管理系统、火灾事故应急处置措施、危险废物的环境风险防范措施，制定应急预案等。 |
| 其他环境管理要求 | 根据《固定污染源排污许可分类管理名录（2019年版）》，属于“三十四、计算机、通信和其他电子设备制造业”中“89电子器件制造397、电子元件及电子专用材料制造398”-“其他”，属于登记管理。排污单位应建立环境管理台账记录制度，落实环境管理台账记录的责任部门和责任人，明确工作职责，并对环境管理台账的真实性、完整性和规范性负责。雨排口规范化建设，雨水排放口前端设置明渠（排放井）和初期雨水收集池，便于日常检查、采样检测，排放口安装截止阀，受污染的初期雨水需经处理达标后方可接入雨水管网。 |

六、结论

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| 综上所述，从环境保护角度，建设项目环境影响可行。 |